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OCCUPATIONAL THERAPY

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OT Dept

Education Issue

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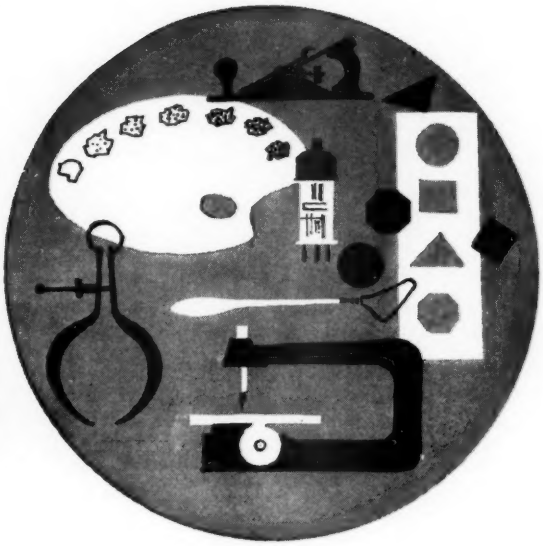

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The American Journal of Occupational Therapy

The Official Publication of the

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Manuscripts should be typewritten, double spaced, with liberal margins and submitted in duplicate. References should be listed at the end of the article and not as foot notes.

Illustrations may be included. Photographs should be glossy prints 3" x 5" or larger. Drawings must be drawn and lettered in India ink on heavy paper.

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PEOPLE YOU SHOULD KNOW

An individual honor was also an honor for all occupational therapists when, on November 1, Colonel Ruth Robinson was appointed Chief of the Army Medical Specialists Corps. Having served as the first chief of the occupational therapy section of the Corps from 1948 to 1952, she is well qualified for the exacting demands of her new position as supervisor of the dietitians, occupational therapists and physical therapists in the Armed Forces. She replaces Colonel Harriet Lee, a dietitian who has been chief of the Corps for the past four years.

As the retiring president of the American Occupational Therapy Association, Colonel Robinson is known to all occupational therapists who admire her ability to organize and execute a prodigious amount of work without ever losing her enviable sense of humor, her ability to express herself succinctly, her lack of officiousness, and her sense of style—all attributes that will not only enable her to meet the responsibility of her new appointment but also to be a credit to the position.

THE AMERICAN JOURNAL

of

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DA VINCI IS DEAD

The Case For Specialization

CARLOTTA WELLES, M.A., O.T.R.*

Leonardo da Vinci has been dead for over four hundred years. He may have been the last single individual to possess a significant portion of existing knowledge. Minds like those of Winston Churchill or some of our recent television personalities may for a moment lead one to question this, but only for a moment. In the last half century organized knowledge has moved forward so rapidly that it is no longer possible for one individual to be fully competent in even one branch of it. Some of the other professions have accepted this concept and have divided their areas of knowledge into sections. They offer a highly specialized and therefore advanced training and expect their personnel to practice or function with highly specialized competence. We have only to look at the doctors, the lawyers, and the engineers to see the principle of specialization of both knowledge and function in successful operation. It is obvious that they could not do otherwise. Can we? Is occupational therapy still a simple, elementary discipline? Is there one of us who knows all about it? Can any one occupational therapist be expected to be fully competent in department management, student training, treatment of the cerebral palsied and the psychotic, as well as in industrial therapy and home care? Yet these are only some of the areas in which the occupational therapist is expected to function as a fully qualified member of a team of specialists. How many of us as individuals function on several levels and with all types of patients while employed in one given position? Yet we continue to offer one training program leading to only one type of certification which we suggest is evidence of qualification.

There is widespread feeling that our present practice is no longer adequate. For example, was there ever a clinical directors' meeting when additions to the curriculum were not vehemently discussed? Many occupational therapists have sought and found a variety of ways to increase their own specialized knowledge. In the past three years the number of advanced or special short courses offered has been literally phenomenal.

Let us consider some other aspects of this present situation. Employers are interested in objective evidence of qualification of staff which may be employed. We ourselves emphasize the importance of registration, yet do we not lessen the significance of the very thing we are trying to build up by implying that registration is evidence of qualification for any type of position on any level? Fortunately universities require additional qualifications of those who are to hold academic appointments and some employers require a stated number of years experience of those seeking administrative positions. It is observed, however, that neither academic degrees nor years of experience can guarantee, can even indicate, the nature and extent of the knowledge and competence of the individual with respect to the position in question.

Now how does this picture affect us as individuals? There is widespread interest in taking additional courses, but each must select for himself those which he believes will best qualify him for the work he is doing or which he proposes to undertake. There is no defined body of knowledge which when mastered will presumably qualify one to hold a higher level position, nor any evidence of qualification for such a position. Furthermore, the individual who has sought to further qualify himself through graduate education or continued study often finds that except in

*Chairman, Committee on Graduate Study, American Occupational Therapy Association, 1956-1958.

academic circles, his study is neither recognized nor rewarded. We are fortunate in having in our profession some who have qualified themselves as specialists and who are well known for their competence. This has occurred almost in spite of our educational system. These people have studied, have engaged in research, and have written in their field. Yet we have no way to designate their competence, no way for others to systematically become as competent. Some therapists have stated that they specialized in one area or another, which is proper and to be encouraged, though at present this can indicate merely interest, or perhaps experience. We have no specialized standards, no specialized education, and no type of certification for specialization. We are, at best, like those general practitioners who take additional courses in order to remain qualified. Yet they recognize the role of the surgeon, the cardiologist, etcetera. Where are our surgeons and cardiologists, i.e., those with particular qualification for a particular type of service?

The preceding paragraphs are not offered in criticism and it is readily acknowledged that the development of education and practice in occupational therapy has shown great growth in recent years. A tremendous amount of work has been done in building standards, guides, educational programs, and special courses among other things. Other professions have done likewise. It is urged however, that we all give some serious thought to where we go from here. The following recommendations are offered for consideration.

1. We should continue to define function with greater precision as that which is ill defined cannot be divided. It should be better defined as a whole, but this is not to suggest that someone else, the usual "they" do it. It must be done by departments and by individual therapists.

2. Let us accept the concept of specialization in the field of occupational therapy. We may think of it as similar to a large wedding cake which must be cut in layers or levels, then again into portions. At least three levels are indicated, corresponding to aide, staff therapist, and director-teacher positions. These levels should then be vertically divided in some way. Since our traditional "areas" are currently under consideration these divisions will not be discussed. The point is however, that no one can become a specialist in treating every type of patient with a great variety of objectives using many different methods of treatment.

3. Special educational programs and resulting certification have been initiated for aides in the psychiatric field. It is believed that similar positions should be defined in other areas with appropriate training and certification developed for them also.

4. It is believed essential that our present education and registration be maintained much in their present form regardless of what degree is to be ultimately awarded for the basic program. This should constitute the initial professional preparation of every occupational therapist.

5. It is urged that educational programs with certication be developed to follow the basic preparation. These might be offered in fields such as cerebral palsy, psychiatry, teaching, departmental or school administration.

6. Finally, it is believed that we as occupational therapists should function in light of this concept of specialization. At least after an initial period of exploration of his new profession each therapist should plan his own program of specialization and growth. Jobs should be selected for the opportunity they offer for professional growth as well as to be of service rather than merely for their geographical setting or salary offered. Job changes should remain consistent with this plan. Personal and professional growth should be a constant and on-going process characterized by continued study and serious pursuit of objectives.

It is recognized that the development of the concept of specialization as herein suggested will be difficult. Our growth up to the present time has not been easy nor has it been accidental. It is believed however that the development of specialization as a concept and as a part of our educational philosophy and system will greatly increase the value of occupational therapy. It will enable employers to build a staff with specific qualifications for particular positions. It will guide universities in the development of curriculums designed to meet the needs of the field and to qualify graduates for particular types of work. It will assist individuals in planning and carrying out their own plans for professional growth as well as increase their worth to their employers. Shall we decide that specialization is the direction of growth, or shall we remain "country doctors"?

A nine weeks postgraduate course in cerebral palsy is being offered by Columbia University from March 2 to May 1, 1959, to acquaint potential leaders with (1) basic knowledge, (2) present status of therapy, (3) controversial features of our present understanding. For further information write:

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THE PRESENT STATUS OF GRADUATE EDUCATION IN OCCUPATIONAL THERAPY*

WILMA L. WEST, M.A., O.T.R.*

Introduction. To understand the distinguishing characteristics of true graduate study, we must consider the reason behind its origin and development. In America, this form of education is only about 100 years old, since it is usually credited as dating to the establishment, in 1876, of Johns Hopkins as the first university and thus the pioneer in American graduate education. One commentator, noting that the future of graduate study seemed brighter after 1850 than ever before, explained this as a development to fill the void between the college course and the sum total of learning which was growing steadily as research progressed.

Some enduring characteristics of graduate education. In the literature that will be distributed to you later, we have reproduced selected quotations from the writings of such men as Nicholas Murray Butler, Abraham Flexner, Robert Maynard Hutchins, James Rowland Angell and other generally acknowledged authorities on education. In these, we find key words and phrases which repeatedly emphasize enduring concepts of graduate study. Among them are such statements as these:

"The purpose of graduate education is not so much to impart knowledge to the pupil as to whet the appetite, exhibit methods, develop powers and strengthen judgment."[1]

"Graduate education must be characterized by creative activity, productive and critical inquiry."[2]

"Where students adequately trained by previous study of the liberal arts and sciences are led into special fields of learning and research."[3]

"Graduate study must help the student to develop his faculties, must train him to think independently and critically, so that he may form his own judgments."[4]

"Graduate education is obliged to produce leaders."[5]

"Research is the distinguishing phase of graduate work."[6]

Differentiating "graduate" from other forms of education. We in occupational therapy are either unfamiliar with or unconvinced of the nature and significance of these principles and characteristics of graduate education. We have not yet adequately distinguished between basic, undergraduate, professional preparation and true graduate education for our discipline. To better appreciate these differences, we might think, for a moment, about the general progression of total education. For example:

In *elementary school:* we are taught the three Rs, which are basically the tools of communication with the world in which we live, and a few other subjects such as geography, history and social studies. Because of the limited potential for assimilation at this age, this level of education virtually does little more than open a door to the entire field of learning, beyond which many never go.

In *high school,* we have advanced courses in English, math and history and our first exposure to language and science. At this level, education is still fairly standard for all and predetermined in accordance with the basic minimum requirements for secondary education.

In *college,* however, we find a broadening of the potential field of study available. Here, we "major" in the area of our interest but still basically pursue a "liberal" education, which is defined as "education for culture rather than as a preparation for a profession or immediate practical use." Thus, we study more languages, sciences and history and add such subjects as literature, philosophy, art, religion, economics, sociology, etc. Here, too, we find differences other than in the subjects taught. For example: we have more specifically allocated study time interspersed between scheduled classes; we have a degree of option concerning attendance, in the form of cuts; supplementary reading, and the writing of reports, term papers and the like take the place of a measure of didactic instruction.

Then, in *professional education,* we find still more differences. At the outset, we are aware of the emphasis on a core curriculum and the "elective" character of the college course is now conspicuously absent. Here, for the first time, we must learn specific professional techniques and skills; and here, too, we have our first experience with education designed to equip us for earning a living. In a word, professional education gives us a tool with which to do a specific job.

Finally, in *graduate education,* there are still more differences, as expressed in the selections quoted and in one other that I saved for special emphasis as singularly expressive of that concept a graduate program must reflect: "Where the student is offered the realms of learning to explore at will. At entrance, he stops being taught and begins to learn. His education depends on himself."[7]

Existing and proposed graduate programs in occupational therapy. In occupational therapy at the present time, there are four graduate programs:

University of Southern California, Graduate School, offering specialization in any one of the following six areas: physical disabilities, psychiatry, pediatrics, general medicine/surgery, prevocational evaluation and teaching.

New York University, School of Education, providing for emphasis in education, specific disability areas and guidance and counseling.

Western Michigan University, School of Graduate Studies, offering advanced courses in medical subjects, therapeutic media and administration.

San Jose State College providing for preparation of teachers of occupational therapy in schools and colleges and administrators and supervisors of clinical occupational therapy departments.

In addition, there is a proposed graduate pro-

*Read at the workshop on "Graduate Education—Directions for Growth." AOTA midyear meetings in Denver, Colorado, April 12, 1958.

†Coordinator, Curriculum Study Project, AOTA.

gram scheduled for implementation in the fall of 1958 at the:

University of Nebraska, College of Medicine, offering specialization in psychiatric occupational therapy.

All but the last-named of these, which has not as yet admitted candidates, have from one to ten students enrolled, including several on a part-time basis. In addition to these programs, however, many occupational therapists are matriculating for masters' degrees in such allied fields as education, guidance, psychology and, occasionally, in sciences such as physiology.

Evaluation of graduate education in occupational therapy. Since published course descriptions and other literature describing graduate programs are always brief, rarely philosophical and usually inadequate to provide a thorough understanding of either concept or content, it is difficult to evaluate the current status of graduate education in occupational therapy. In the interest of healthy self-assessment, however, we must attempt a few observations. These are grouped into three categories which express positive, neutral and negative evaluations:

1. In some instances, unfortunately the minority, we find philosophies briefly consonant with principles of graduate education. For example:

"Assumes a broad base of knowledge and training in the field of the degree."

"Assumes increasing responsibility by the student for many aspects of his own learning; independent study and inquiry are encouraged and required."

"Course work is concerned with complex ideas, materials, techniques and problems. It demands searching and exhaustive analysis, creative and inventive work, the investigation of principles which distinguish the discipline concerned, discovery and application of sound principles of analysis to new materials and problems, development of competence in individual inquiry through training in use of materials of independent study and demonstration of this competence through effective oral and written presentations of findings from such inquiry."

"To increase theoretical knowledge, implying deeper understanding rather than mere increase of skill; to teach research methods and communication of research; and to add to liberal education."

2. In other cases, we find no *expressed* evidence of adherence to the high principles which should characterize graduate education. This may, but does not necessarily, indicate their absence in practice.

3. In still others, we find specific contraindications for graduate education philosophy and practice. For example:

Some note: "It is assumed that MA specialization will go beyond BS levels and that deficiencies will be made up."

Some masters' programs seem designed to fill gaps in undergraduate education occasioned by omissions or inadequate emphasis. Their courses bear titles identical or strikingly similar to those taught on the undergraduate level, except for insertion of the word "advanced."

Few seem dedicated to the principles of independent study and learning that are the distinguishing characteristics of graduate work. Curricula are generally comprised of specific courses designed to "teach" principles and techniques through the conventional form of direct instruction. Few seminars are included. Theses are not universally required.

Since none of the current programs *require* practical experience between undergraduate preparation and candidacy for graduate study, it is questionable whether individual investigation such as should characterize graduate level work can be meaningfully undertaken.

Some questions concerned with "Directions for Growth."

1. Surveys of occupational therapists with graduate degrees indicate that a decided majority have sought degrees in allied fields rather than in their own profession. Since nearly all of these were acquired subsequent to the establishment of graduate courses in occupational therapy, what are the reasons for and implications of this preference?

2. Since a first principle of graduate study is that it be based on strong undergraduate preparation, do we need greater attention to improving basic professional courses, along lines indicated by several recent evaluations, prior to further development of graduate programs?

3. Although there are several schools of thought on patterns for graduate education, a trend toward diffusion rather than concentration seems evident. Are our present and proposed masters' programs reflecting this need for liberalizing professional education or obscuring it in the development of specialty curricula?

4. Since there is evidence to the effect that not all bachelor's degree-holders are capable of a high level of graduate study, should requirements for admission to masters' candidacy be raised? For example, it has been suggested that only the top one-third with BS or BA degrees should be eligible.

5. Our present faculties of graduate programs have some members who do not possess a higher degree than the one they are conferring. Some do not even have an equal degree. This does not, ipso facto, mean that such persons are not qualified to instruct in graduate programs since it does not take into account their advanced experience. It does, however, raise the question of whether they have the philosophy and approach which are integral to the best concept of graduate education. For example: Do they "lead the student to the threshhold of his own mind and bid him enter"? Do they know how to stimulate students to individual research and investigation? Are they qualified to conduct thesis seminars and chair thesis committees, never having written a thesis themselves? Do they concentrate on imparting their own knowledge and skills in a particular area at the expense of

(*Continued on page* 299)

AN OCCUPATIONAL THERAPY CURRICULUM FOR 1965*

MARY REILLY, M.A., O.T.R.†

INTRODUCTION

One of the distinguishing characteristics of the professions is their ever increasing assumption of responsibility in providing for the needs of the people they serve. Still another great characteristic is their tendency towards self maintenance or self policing. The professions are, I believe, at their most sensitive and responsible best when they concern themselves with the basic education which supports their practice.

Today, in most of our colleges and universities, we are seeing evidence of a deep concern that goes beyond the restlessness of the times. Rapid advances in scientific knowledge applicable to the medical fields are forcing continuous curriculum readjustments. Mature professions appear to be accepting the reality that, if their basic course fails to cope with today's enormous scientific heritage, their practice cannot survive. The present concern seems justified when we consider that it is the basic course more than any other single factor that is predictive of the future success of a profession.

So, in these times of great scientific, social and economic change, curriculum revisions and experimental educational programs are the order of the day. We are long overdue in joining the trend toward self evaluation. I, for one, am convinced that our professional educational system is in need of a fundamental revision. My conviction stems from the following awareness:

1. The educational programs of the older allied medical professions are feeling the disruptive influences of the 20th Century rush of scientific advances. We are in the same environment. Why are we not responding to these same changes in a rational way?

2. The entire life span of our young profession has been in a time of turbulent change. We have had few quiet chances to integrate and evaluate our knowledge.

3. Occupational therapy, born in World War I, expanded to triple its size in World War II, is still troubled in the fifties by its own undigested growth.

4. The curriculum was invented under the auspices of privately owned technical schools. In the last decade the colleges and universities have exerted the major influence upon its development.

5. Our profession by its nature is centrally located in the field of rehabilitation and has been since the time of its inception. Medicine is now in the mid-century officially accepting its responsibility and turning its attention toward the development of this social phase of treatment. Occupational therapy, therefore, is in the vanguard position of being moved forward or of being by-passed.

For these and for many other reasons which time does not permit me to delve into, I feel it is timely for us to consider the state of our basic occupational therapy course. We need to give more thought to what we want a basic course to do for our profession. We need, also, to envision the curriculum as an instrument for determining the progress of our profession. Because of the times we live in and because of the kind of profession we are in, we have no choice but to re-evaluate our educational system. It is from this background of reasoning that my ideas have taken shape. I should like to present the ideas in much the same spirit that compelled Dean Berry of Harvard Medical School to say, when he was urging the medical schools to revise their curricula: "Let us not forget that if we do not do some hard thinking and acting right now, someone, whom we believe to be less competent than we, will do the acting for us, and without the thinking. If we believe that we are the best architects of our curriculum, it is up to us to produce the plans."

EVALUATING PROFESSIONAL CURRICULA

A stubborn, but necessary, question that must be raised is: How might we go about evaluating any professional curriculum so that we could judge its need for revision? Blauch[1] has defined the professional school as the gateway to practice. He describes it as collecting from a wide variety of sources a wealth of fact, ideas, principles and technical procedures appropriate to its field. These it reorganizes systematically with a view to their application in practice and their mastery by students. The curriculum is described as uniting a group of subjects which are intended to develop the intellectual comprehensions, the practical skills, and the professional attitudes that a student of the profession must require. Granted that this is an adequate description of the nature of professional education, we are still faced with a need to assess the factors that enhance or deter its growth.

In a recent study, *Medical Education in the United States,* Dr. D. Joe Baughman[2] has isolated what he believes to be the major forces controlling medical education. Baughman believes that these forces must be recognized and studied when major curriculum revisions are be-

*Presented at the joint meeting of the education committees of the American Occupational Therapy Association, Cosmopolitan Hotel, Denver, Colorado, April 12, 1958.

†Doctoral candidate, University of California at Los Angeles.

ing considered. Although the Baughman study covers three centuries of well documented change occurring in the medical educational system, it has a surprising relevancy to changes occurring in many other professional curricula.

The assumptions borrowed from the Baughman study for the purpose of evaluating the status of the occupational therapy curriculum are:

1. Professional curricula are subject to certain evolutionary forces that drive or impel them towards maturity.
2. These forces are
   a. The practice of the profession
   b. The level of general education upon which the profession rests
   c. The scientific knowledge upon which the practice rests
3. These three evolutionary forces constitute an interrelated and overlapping phenomenon.
4. Changes which have resulted from an increase in one of these three influences are possible only at the expense of the influence of another. It is around these three forces that I have chosen to discuss the occupational therapy basic curriculum and upon which I shall attempt to hypothesize a revision.

THE DEMANDS OF PRACTICE

The Empirical Force

The first and most persistent force that shapes a curriculum is practice. Practice has always demanded that its procedures be represented directly in the curriculum. When practice or empiricism is the dominant influence, great blocks of time are committed to factual knowledge and the how-to-do techniques. The curriculum is said to grow and grow by the addition of factual knowledge. It seems easier to keep adding than to reorganize.

The occupational therapy curriculum is now approaching the 50th year of responding to a strongly demanding practice. We have committed great blocks of time to factual knowledge in the sciences and the crafts. We know that knowledge in these important and practical areas must increase if we are to maintain the working comprehension that practice demands.

There are certain things that a profession must acknowledge about itself when its curriculum and practice are predominantly empirical. When straight line relationships can be drawn between what practice is doing and the content of the curriculum, the program is defined as a technical one; and the emerging students are described as being trained to adjust to practice. By contrast, when a curriculum is built from the constellation of conceptual understandings that support practice, then the curriculum is defined as a professional one; and the emerging students are described as being educated to develop the skills of practice. Subtleties of this nature need to be given more weight in our educational system.

It is true that each profession begins as a skilled craft and gradually accumulates its own specialized body of knowledge. Occupational therapy not only had such a beginning but, to date, many of its basic principles and theories remain unformulated. Historians have correlated professional growth and progress with the transition that is made from the empirical to the scientific state. The transition process has been described as the narrowing of the range of empirical content and the broadening of the range of rational theory. The question has been raised by Baughman, however, as to how long a profession should age in its factual or empirical state before it is deliberately re-organized. I hold that the field of occupational therapy is *ready* for re-organization now.

Evidence for curriculum re-organization abounds around us but I chose to describe it in terms of two phenomena. These I have named the "Fibber Magee Phenomenon" and the "Idiot Savant Phenomenon." The Fibber Magee Phenomenon is experienced when, in answer to an additional requirement of practice, we attempt to tuck in just a bit more material, and the contents of the curriculum spill around us. The Idiot Savant Phenomenon has to do with the effect that a factually overloaded curriculum has on the students. By definition this is an idiot who is able to memorize a fabulous amount of material. The details that an occupational therapy student must memorize has accumulated to the point of possibly obscuring principle. Students must assimilate masses of facts, not necessarily related or explored as to their validity. In the clinical application of today's enormous bulk of didactic information, our students are being labelled or libeled as "immature."

GENERAL EDUCATION

The Second Evolutionary Force

General education refers to the academic level upon which the professional program rests. The level, in essence, determines the academic readiness to absorb scientific knowledge. The different professions vary as to their requirements; but the level itself is usually discussed in terms of when the first professional degree is conferred. Nurses, for instances, have a dual level of education which consists of a hospital school program of several years and a university program of four years. The hospital school diploma course runs in the ratio of 8 to 1 to the bachelor degree program. Physical therapy and occupational therapy also have a dual level of education. They both grant a first professional degree at a bachelor's level and a certificate at

a post bachelor level. Social work confers a first professional degree at a master's level.

It is interesting to note in passing that at the bachelor level and below, the services of the nurses and the therapists are ordered or prescribed; at the master's level and above, social workers and psychologists are invited in or consulted with for treatment. We have in the past attributed our doctor-therapist communication problem to many causes. We may be moving toward a greater maturity when we can consider our communication difficulty in terms of the academic level at which we are able to comprehend scientific knowledge.

But what about the state of our educational level? Has our educational system been responding appropriately to the evolutionary force? In general, such a question could be answered affirmatively. We have had a gradual rise in the educational level. In the past decade all occupational therapy schools have merged their basic professional program with the requirements for the college or university bachelor's degree. Currently, however, we are experiencing a widening range of educational differences covered by the label "basic curriculum." The growing differences in the years to come will probably require a new answer. Some of the differences, as I see it, are:

1. Some schools of occupational therapy are located in institutions of higher education which have: low admission requirements; a weak required pattern of academic undergraduate work; few if any of our allied professions housed on their campuses. Professions such as engineering are currently questioning the suitability of this environment to provide quality education for engineering.

2. Schools of occupational therapy are also located on campuses which have high admission requirements; a strong pattern of undergraduate preparation; resources designed to support the programs of the major professional schools.

3. In addition to the basic course granting a bachelor's degree, there is also a certificate course offered at a post bachelor level and granted without degree recognition. The certificate course in an academic environment constitutes a "degree monstrosity."

We know from experience that the student product of the three programs is different. It is, in my opinion, a matter of time before we will have to recognize the difference. I should like to be able to predict that eventually, or in the next 25 years, our first professional degree will be raised to the master's level and that extensive use will be made of the junior and senior undergraduate years as a planned phase of the basic course.

SCIENTIFIC KNOWLEDGE

The Third Evolutionary Force

Baughman[2], in his theoretical frame of the forces that impinge upon the professional curriculum and determine its evolutionary growth, has implied a need for a balanced relationship. He has made the assertion that when either practice, general education, or scientific knowledge becomes the dominant force, its influence is achieved at the expense of the others. The main thesis being presented in this discussion is that the field of practice is the dominant influence on the occupational therapy curriculum. It follows as a necessary conclusion that a curriculum which is strongly empirical would be developed at the expense of rational and theoretical content.

A curriculum founded on scientific knowledge has, as its central purpose, according to Pickering[3], the disciplining of the student's mind in the powers of observation and critical judgment relevant to the field of practice. To insure the clarity of thought necessary for the manipulation of data in the medical field, Pickering feels that today's curriculum must be drastically reorganized. The great obstacles he found to a reorganization in the direction of scientific knowledge are: (1) the enormous volume of the so-called "facts" in traditional curricula; (2) its rigidity; and (3) its disorder. Pickering predicts that an attempt to reduce and instill an integrating influence is likely to meet the obstinate conservatism of old subjects and the predatory enthusiasms of the new.

Despite the difficulties presented by the third evolutionary force, scientific knowledge appears to be the focal area upon which to restructure our occupational therapy curriculum. It is, therefore, around an essential scientific core, consistent with the advancing needs of our practice, that we should revise the basic curriculum.

BASIS OF REVISION

A few of the underlying assumptions to my revision proposals are that the occupational therapy content is growing, time in school is limited, and our present curriculum structure is no longer expedient. For our future effectiveness we need to determine what in the curriculum has become archaic and what is new and of significance to our progress. It is important that a revised curriculum retain the best of the old and in a form that new material may be built upon.

We could build, of course, a hypothetical program that would bring into closer harmony the demands of practice and the content of the curriculum. A revision at this first evolutionary stage would be most unexciting and a temporary expedient at best. An analysis and evaluation

of current practices and curricula might tell us what to eliminate and what to emphasize. It, however, would not tell us anthing more about ourselves than we know right now. It is conceivable that it might fix us in our present empirical or technical state for many years to come. Historically speaking, a study at the first evolutionary stage would provide a record of our procedures at the level of labels, recipes and superficial descriptions. Perhaps this is a type of ordering or clarifying that we need as of now. I, for one, would be reluctant to believe so.

Let us suppose we were to build a hypothetical program based on the evolutionary influence of general education. The question is whether the level should be raised, lowered or remain as is. It is growing more difficult to justify the improvement of professional education at the expense of decreasing the preparatory general education. General education has more than proven itself as the best possible preparation for survival in the midst of the scientific and social change in which the professions abound today. It is doubtful whether the level of general education upon which the occupational therapy basic program rests could be changed by an external edict. Our present education level will probably remain stationary so long as we retain our empirical approach to treatment. When our practice becomes dependent upon the scientific approach based on scientific knowledge, the proven need for more scientific content will impel a rise in the general educational level.

My choice for the curriculum of the future, therefore, would be one devised at the third evolutionary level. A good "64,000 dollar question" might be: How does one go about building such a revision? Although I have entitled my subject "A 1965 Curriculum," this is essentially a facetious label. It is facetious because revising a curriculum which supports a profession is a rational and vigorous process of great significance to a profession. It should not be done by one person or by one group. It is customarily brought about through the creative leadership of the educational councils of the various professions. Curriculum revisions emerging from such an atmosphere, tend to be the outgrowth of understanding that the council achieves from its years of planned curriculum studies, as well as data collected from content, methods of teaching, the examination system and the effect of the educational system upon students.

My "1965 Curriculum" is merely a device designed to intrigue you with the advantages that might attend a revision. It is offered as a stimulant to thought, and, I hope, as a mutual point of departure for agreement and disagreement. It is not conceived as having existence in any particular point in time or place. The proposed curriculum, therefore, is a hypothetical model devised and presented to prime the pumps of curriculum evaluation thought.

A 1965 *Curriculum*

The purposes are: (1) to provide students with those experiences that will enable them to develop in practice; (2) to redistribute present technical knowledge through broader concepts.

The objectives (taken directly from the "Objectives of Undergraduate Medical Education") are: "The undergraduate course must provide a solid foundation for the future development of the student. It should not aim at presenting the complete detailed systematic body of knowledge concerning each and every medically related discipline. Rather, it must provide the setting in which the student can learn fundamental application to the whole body of professional knowledge; and can develop the ability to use these principles and judgments wisely in solving problems of health and disease."

The design rests on the assumption that much of the guidance for curriculum revision may be obtained from experimental curricula now being developed by the older and larger professions. A review of current experimental educational programs show that they are attempting to find answers to many of the problems we share in common with them.

Philosophy determines the direction which the curriculum takes. Not even for a hypothetical curriculum, therefore, can I just take off in any direction. Unfortunately, our philosophy in occupational therapy has not been formulated to any great extent. It is necessary for the immediate purposes that I evolve one, as the foundation of the curriculum cannot be established without a philosophy. As an expedient device, I shall attempt to unseat two of our current philosophical contentions. These are that "occupational therapy is any activity physical or mental" and "occupational therapy treats the whole man." Such statements are harmonious with each other in that they are both global in nature; however they are curricular impossibilities! Not even a lifetime curriculum could fulfill the educational implications of these cliches. If one were to apply the logic and tenets of philosophy we might conclude with a definition that simply states that: "Occupational therapy is treatment with activity." Such a definition, I believe, could be expressed in a curriculum.

That "occupational therapy treats the whole man" implies that we are, or could, develop competencies to treat all the needs of man. This

might include the multifaceted spheres of the physical, psychological, social and economic, not to mention the spiritual. No other profession I know of has such an all comprehensive hunting license. A further implication of "treating the whole man" might be that if we do the job, other professions do not. Professions traditionally mark off special areas of behavior within which they develop their techniques. In each special area of concern, professional competencies are practiced and developed within the understanding of the total behavior context. It is imperative that we first define an area of behavior of special concern to us. From such a delineation we might proceed to designate the specific behavioral knowledge upon which to build a curriculum.

The area of concern which would appear to be of special interest to us is "work" or, if we choose to call it by its more generic term, "activity." Next, we would have to search out its central nature in human behavior. We know that man uses certain behavioral roles for his self actualization. The roles that are of concern to us might be those that man assumes in the spheres of occupation and recreation. The life satisfactions found in these spheres can be disrupted by disease and injury and when they are profoundly disrupted, man has great need to have them restored through professional help. Restoration of life satisfactions sought for in the spheres of occupation and recreation requires organized knowledge in the following behavioral areas: the reflex state, motor skill state, achievement level, patterns of interest, learning and personality structure. It is to be expected that such behavioral knowledge will be represented in the curriculum and patterned to fit the special needs of occupational therapy.

Dimensions of content. The behavioral knowledge, so selected, needs to be organized and patterned into occupational therapy curriculum content in different dimensions. The dimensions of content that I have selected arbitrarily are: (1) medical science knowledge; (2) media knowledge; (3) knowledge of the treatment process in occupational therapy. Although there is a recognition that each dimension overlaps and interacts, for the sake of clarity each will be defined and described separately.

Knowledge of medical science. Since the basic curriculum is to be reserved for fundamental knowledge, we are compelled at this level to select those medical sciences that would have the greatest applicability to the whole field of practice. By this rule, we need not feel compelled to provide for all the fields of specialties. I believe there is some agreement among us that we need to provide a sound knowledge of medical sciences necessary for the practice of physical disability and psychiatry. I think that you would also agree that, of late, these two fields are growing apart in interests and sympathy and need to be more closely related. For its integrating effect upon these two fields in particular, and upon practice in general, I have selected the field of pediatrics. The medical sciences supporting the 1965 basic curriculum are established, therefore, as those that lead to the applied fields of physical disabilities, pediatrics and psychiatry.

I would not include in the basic curriculum preparation for either the specialty of general medicine and surgery or tuberculosis because:

a) Knowledge in general medicine and surgery does not have a basic integrating effect on physical disabilities and psychiatry.

b) The scientific knowledge upon which general medicine and surgery rests is concerned with homeostatic mechanisms of adjustment and concomitant habit structure. This is more advanced than fundamental knowledge. To include it in the basic course would probably condemn it to the superficiality of its present state of practice.

c) Knowledge in the field of tuberculosis would also not be included because content in this area should be an outgrowth of the prevocational field which to date has not emerged in a form which deserves an inclusion as fundamental knowledge.

The great problem associated with medical science content is how to trim its giant proportions down to a manageable size. The sciences that support the medical field have advanced far beyond the present curriculum's ability to absorb. We have need of a skilled and perceptive overview to reduce the material to a functional state. I am suggesting that we make use of a method now in vogue in other educational systems and known as the correlation method. Correlation is essentially the process of selecting and relating material. It is the sort of curriculum committee study that has been used in medical education for the last twenty or so years. The procedure is designed to break up the compartmentalization of related medical sciences and to build single courses that stress principles and concepts, and the dynamic relationship existing among structures and systems. Correlation studies are a continuous process performed by both academic and clinical specialists under the leadership of councils on education. The results are distributed throughout the educational system via "teaching institutes." Each study holds continuously before itself two questions: What knowledge is the most worthy of being taught; and how should this knowledge be organized and presented so

that the mind of the student would be developed through interacting with it?

The medical science curriculum content most relevant to the field of occupational therapy has yet to be established to any great degree. Knowledge that might best develop our practice could be in all probability effectively obtained through correlational studies. I am proposing, therefore, for valid content of the first dimension:

1. *A Correlation Study for Pediatrics*

In the field of growth and development: to provide students with an understanding of the emerging nature of man; and to provide ontogenetic reinforcement for the medical knowledge supporting the physical disability and psychiatric fields.

2. *A Correlation Study for Physical Disability*

In the field of neurophysiology to familiarize the students with: sensory-motor concepts; the cerebral organization of this data; and the theories of treatment that make certain assumptions about the central nervous system and hence have their focus of advantage for certain problems. It is to be expected that students emerging from such a course would outgrow, through clinical experience, the theories of Warm Springs, Phelps, Bobath, Kabat and Rood, and develop creative theories that would enhance scientifically their practice in physical disabilities.

3. *A Correlation Study for Psychiatry*

In the field of psychology to develop content that would familiarize the students with normal personality structure; engender an understanding of themselves as adults and therapists; provide an understanding of the reactions of personality in stress-health disease; and teach the theories of treatment from the assumptions made on personality and, hence, having a particular focus of advantage for certain treatment problems. Again it is to be expected that in practice the students would outgrow the theories of Freud, Allport, Sullivan, Catell, Rogers, etc., and develop theories that would express their ability to think scientifically about personality.

A profession is said to be moving towards sound maturity when, and if, it develops comprehensive theories to guide its practice. Carefully devised correlation studies might serve to organize medical science data in such a way that the mind of the therapist would be freed to theorize. In such an atmosphere of critical thought perhaps we, in occupational therapy, could develop an effective theory of human coordination that might guide our treatment techniques in physical disabilities; and a theory or work satisfaction that might guide our treatment techniques in psychiatry.

Knowledge of media. The second dimension of content that needs to be organized is our media area. A characteristic of a mature profession is its pride in and its vigorous use of its media. The concepts from which we view our media need desperately to be broadened. If we are to establish a rational basis for occupational therapy, we must speculate on the meaning of work and activity in our society and in the personality structure of man. I propose that a correlation study be done in counseling and clinical psychology to establish constructive activity as a special phase of the socialization process, and the development of interests as a special case of the general motivational theory.

From such a correlation study a psychology of occupation might emerge and serve as a general frame of reference from which to teach the adaptation of our media to the physical and the psychological areas. In the physical disability field, human movement or kinesiology has yet to be related to the physics inherent in various forms of activity. Physical movement as it is influenced by weights, springs, pulleys and functional devices is moving toward, but has not reached, a unifying theory. In the field of psychological adaptation our media have yet to be related formally to existing organized knowledge in human aptitudes, abilities, interests, aspirations, authority reactions and learning. The knowledge of how to do the activities which we use as our media is a formidable burden for our curriculum to manage. It is suggested that the techniques of how to do the media be unified through the theory of instruction. By this method students could master the media as they learn how to teach the activity.

Knowledge of the treatment process. The third and last dimension of curriculum content to be discussed is the treatment process per se. The treatment process is essentially a special case of the scientific method. Students can be prepared for clinical problem solving by being given certain mental discipline in fact gathering and fact judging. For professions that educate below the master's level, the problem solving or scientific method must be deliberately introduced into the curriculum. This may be done by providing for an orientation in quantitative thinking through statistics, in qualitative thinking through semantics, and in historical perspective through a journal club. For skill in the treatment process a correlation study is suggested in the systematic case study method as used in social work and clinical psychology. Such a study might provide the guidance necessary to make treatment in occupational therapy a science.

Clinical affiliations. The educational revision I have suggested would also require a change in the clinical affiliation phase of our educational program. I believe we have outgrown the method of assignment by diagnostic group and should consider assigning students to affiliation centers by task or purpose. We would, of course, assume some variety of diagnostic groups in the assignments. The task of an initial affiliation might be to familiarize the student with the hospital and treatment procedures by reviving the old apprenticeship method. As an apprentice,

the student would be responsible for the preparation and instruction associated with treatment. His most important task, however, would be to work closely with a master therapist and absorb a way of thinking and acting freed from the responsibility for treatment. In the interest of developing student maturity such a period of integration might be an excellent investment of time. The task of an intermediate affiliation might be to have the student acquire experience in fact gathering and fact judging through the techniques of observation, interview, case history study, and testing. The formulation, the presentation and the resolution of the treatment problem according to the systematic case study method would constitute the major task of this affiliation. In a third and final affiliation the student might be treating patients as described above but its major task would be to evaluate the results of treatment in relation to the population of disabilities of the same type. A normative approach might well create tremendous stimulation to the building of common judgment and literature in our field.

SUMMARY

May I say, in summary, that I am not urging change for the sake of change. The evidence convinces me that our educational system needs restructuring. I hope it convinces you. I made a series of evaluations about the state of our curriculum and practice. I have established a need to revise the occupational therapy curriculum at the level of the scientific knowledge upon which practice should rest. I have stressed the need to expand our knowledge of the functional concepts and principles that are emerging today from the medical sciences. I have urged that we explore and liberalize our understanding of activity and the central role it plays in human behavior. Finally I have stressed the great need to introduce deliberately into our curriculum the experiences, attitudes, knowledge, skills and practices that might enable us to think critically and accurately about the clinical problems that are the special province of occupational therapists. My proposals are based on the belief that the wealth of experience now jam packed in our present system can and should be redistributed into a better vehicle for our future growth.

BIBLIOGRAPHY

1. Blauch, Lloyd E. (Ed) *Education for the Professions.* U.S. Dept. of Health and Welfare (Office of Ed.) U.S. Govt. Printing Office, 1955.

2. Baughman, D. Joe. "A Study of Medical Education in the United States." *J. Med. Ed.* V33, Feb., 1958, p. 132-143.

3. Pickering V. "Purpose of Medical Education." *J. Med. Ed* V33, Jan., 1958.

Graduate Education . . .

(*Continued from page* 292)

furthering the student's individual field of interest and ability? Have they sufficiently utilized the help of faculties of other departments in the university to supplement their own talents in developing masters' programs?

6. Finally, returning to a previously-quoted reason for the development of graduate education, we are reminded that it was "the discrepancy between the college course and the sum total of learning occasioned by r e s e a r c h." Have we amassed a sufficiently extensive "sum total of learning," through research, to identify course content worthy of graduate level education?

Conclusion. Since progress cannot occur in a vacuum, credit is due those individuals and schools who have pioneered the start of graduate education in occupational therapy. Much good has been realized through these efforts to date and more will accrue as greater experience enriches both philosophy and practice. This experience, however, must be characterized by re-emphasis on the highest principles of graduate education. Although it will offend the practical in all of us, we might reflect on the words of Mr. Lowell of Harvard who said, some years ago, that "a university is a place where nothing useful is taught." If this is exaggeration, surely it is in the right direction?

Finally, Grayson Kirk, current President of Columbia University, has consoled us with this thought: "An impressive array of courses is no substitute for intellectual leadership, but the saving factor in the situation is that there is virtually no known curricular device by which an earnest and intelligent person can be prevented from getting an education."

REFERENCES

1. Gilman, Daniel Coit. Quoted by Ryan, W. Carson. *Studies in Early Graduate Education.* New York: The Carnegie Foundation for the Advancement of Teaching, 1939, p. 29.

2. Flexner, Abraham. *Universities.* London: Oxford University Press, 1930, p. 8.

3. Butler, Nicholas Murray. *Scholarship and Service.* New York: Scribner and Sons, 1921, pp. 62-3.

4. Sigerist, Henry. *The University at the Crossroads.* New York: Henry Schuman, 1946, p. 25.

5. Foster, Laurence. *The Functions of a Graduate School in a Democratic Society.* New York: Huxley House Publishers, 1936, p. 12.

6. Ibid., p. 106.

7. Hutchins, Robert Maynard. *Some Observations on American Education.* Cambridge (England): Cambridge University Press, 1956, p. 84.

BASIC CONCEPTS OF CLINICAL PRACTICE IN PHYSICAL DISABILITIES

A. JEAN AYRES, M.A., O.T.R.*

The purpose of this paper is to help clarify and encourage the growth of the fundamental theoretical foundations which underlie the treatment of physical disabilities through occupation. There are specific r e a s o n s why woodworking, games, and comparable activities should be utilized as therapeutic procedures. Weight lifting, manually directed exercises and the like are not sufficient. A commonly accepted justification of the use of the crafts and games as therapeutic media is the emotional value to the patient of an interesting and creative experience. This reasoning is accepted as a basic and important assumption empirically but not scientifically demonstrated. While the interest and pleasure of a creative activity are important, they do not provide the most fundamental and v i t a l concept underlying occupational therapy of physical disabilities.

PURPOSEFUL FUNCTION IS THE ESSENCE OF OCCUPATIONAL THERAPY

It is here proposed that the essential and distinctive quality of occupational therapy is purposeful function. Man is designed and built to perform in terms of purposeful function. It therefore logically follows that purposeful function must be utilized for maximal rehabilitation. These proposals will be elaborated and supported below.

There is a need first to define the nature of the physical disabilities usually treated by occupational therapists. By common usage, the term "physical disabilities" refers to orthopedic and neuromuscular conditions. Within these areas, motor activity demands the largest share of the attention. It includes restoration of motor function (as in improving coordination, range of joint motion, or endurance) and the learning of a task which involves the motor system (as in activities of daily living). Other conditions associated with physical disabilities but not involving motor function (such as abstract reasoning) are not intended to be omitted, however, from the disorders of pertinence to the occupational therapist working with physical disabilities. However, involvement of the motor system as the major concern of occupational therapy with physical disabilities must be kept in mind during the ensuing discussion.

An analysis of occupational therapy media reveals that they have a common element which generally distinguishes them from the media of other medical disciplines. The more conventional treatment media of occupational therapy with physical disabilities can be represented by woodworking, weaving, toys and games. Of more recent origin are the activities of daily living and tasks of a specific vocational nature which in addition have a remedial influence on the physical condition. In each of these media the motor system is utilized as a means toward an end other than the therapeutic process. In wookworking the objective may be the sanding of the board, while the therapeutic process may be increasing range of joint motion. The goal of permanent attachment of two pieces of wood by nailing is a means which also provides the therapeutic process of contraction of the biceps against resistance. The immediate objective in the weaving process may be the pulling of the beater in order that each pick is placed in such a way as to contribute to the total cloth, while the therapeutic goal is the development of strength in the shoulder girdle muscles.

Other goals of other media may be exemplified by accomplishing the objective of the toy or game, having the coat buttoned, a letter typed, the cards filed, or the radio assembled. These goals are reached through the means of motor system performance. While primary in the therapist's planning, the means, which provide the therapeutic process, rightfully become secondary in the cortex of the patient executing the task.

Purposeful motor function, then, is defined as the use of the motor system as a means toward accomplishing a goal which is inherent in the nature of the activity demanding the function. These goals are separate from but vital to the therapeutic objectives involving range of joint motion, coordination, endurance, strength, use of a prosthetic or orthotic device, or performance of activities of daily living.

A child crawls in order to investigate an interesting object seen at a distance; we move our heads in order to see from a different vantage point; we contract our trunk muscles in order that the arms and hands may perform a function from a stable foundation; we reach for objects in order that we may have them in our hands and do something with them; we bring spoons to mouths in order that we may be fed. To go through the motor act required to realize each of these objectives without the objective in mind is not a purposeful activity as here defined, al-

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though a therapist may find some reason for encouraging such motor activity.

It can be further observed that these purposeful treatment media are based on or evolve from activities found in the day to day existence of the average human life. Toys constitute one of the major motor activities of all children; keeping house is one of the major motor activities of most mothers. Some changes are necessitated by practical consideration. Although few homes have looms, weaving simulates maintaining a sitting posture while engaged in manual activity, and utilizes large gross motions of both upper and lower extremities to move an object about. It involves the mind in the creative process not unlike similar processes found in most daily lives. The use of purposeful activities, which are directly—or indirectly through mechanical and intellectual simulation of a process—based on motor demands of a normal human existence, constitutes the common element and distinguishing feature of occupational therapy. Any procedures which are intimately associated with purposeful activity and which are essential to maximally therapeutic utilization of the activities are likewise necessarily the concern of occupational therapy. Examples include testing of eye-hand coordination, manually stimulating cutaneous receptors or proprioceptors, and preceding purposeful motion with a reflex inhibiting posture.

THE MOTOR SYSTEM IS DESIGNED TO PERFORM IN TERMS OF PURPOSEFUL FUNCTION

It must be recognized that purposeful activity, while a distinguishing feature of occupational therapy, is not limited to that profession. Speech therapy involves the purposeful use of speech. Physical therapists use walking as an end as well as a means. Likewise, purposeful activity has long been providing a large part of the foundation of modern educational procedures, where it has demonstrated its effectiveness in the learning process. The educational objective in utilizing purposeful activities is focused on intellectual, social, emotional and motor learning without reference, generally, to the amelioration of the pathological condition. In occupational therapy, the objective is focused on the pathological condition with the learning objective evolving out of the condition.

If purposeful activity is the essence of occupational therapy, one must seek scientific and theoretical bases for its use in the amelioration of physical disabilities. Thoughtful perusal of existing knowledge of the function of man provides strong theoretical confirmation.

The role of purposeful function in the phylogenetic development of men has been pointed out by Temple Fay.[3] He has traced back millions of years the basis of present motor patterns in man. Projecting back to that time, he has reasoned that patterns of movement arose among the early vertebrates to meet the needs of survival. Those patterns which failed to meet that need disappeared or remained in the lower vertebrates. Those which succeeded in meeting the need for survival became ingrained and formed the basis of man's motor patterns today. The motor adaptations made over this large span of time were brought about as a result of purposeful function demanded by the physical environment. In the very early vertebrates, the environment demanded a purposeful function of the body and fins. Later the extremities were called upon to perform movements that would lead to conquest of life on land.

Fay has further theorized[3] that the crossed pyramidal system developed when the amphibians appeared and needed to control the contralateral extremities. The posterior columns appeared when animal structure became supported through the extremities, thus requiring many proprioceptive messages from joints and muscles in order to handle posture and locomotion. The essential point is that theoretically the functional demand came first; the neuromuscular system evolved to perform in terms of function. Accordingly, function is the underlying principle of structure of today's motor system.

Similarly, in the ontogensis of motor function, purposeful activity plays a deciding role. Motor activity begins as reflex action. The cortex assumes control as the engrams for movement (not muscles) are presumably established. These engrams become associated with a motor act according to the purpose of the movement. As voluntary control over finger extensors develops and enables voluntary contraction of the extensors, the child thinks in terms of dropping or throwing, not in terms of muscle contraction. Similarly motor engrams are established for all other movements in terms of function accomplished. For this reason hand function early becomes associated with mental processes and they develop in an interdependent fashion resulting in the fact that in later life mental processes facilitate the use of the hands.

Basing his conclusions on many observations of normal growth and development, Gesell and his associates[5] have pointed out that the eyes are intimately connected with the development (and therefore later use) of the motor system. Many investigators have contributed to the knowledge that vision brings meaning to motor function which would otherwise be difficult to interpret. Vision and sensations arising from movement reinforce each other in the establishment of the

concept of the body scheme, which is fundamental to all purposeful activity. They are so intimately involved in learning skilled acts that after learning the skill, the visual stimuli are a large determinant in evoking the ideational motor planning which is the precursor of all motor acts. The role of vision in guiding the execution of a motor act is more obvious. Vision is not required for non-purposeful motor activity; it is almost always involved when there is a purpose. The full importance of vision in motor function remains to be demonstrated.

It is evident that occupational therapy involves the use of the often referred to eye-hand-brain trio. It is probable that vision and intellectual processes play a vital role in the motor performance that accompanies purposeful activity.

Realization of the importance of neurophysiological mechanisms in the treatment of the motor system is increasing. A study of them increases understanding of how the neuromuscular system operates in terms of purposeful function. The postural reflexes provide obvious examples. In the positive supporting reaction, pressure on the palm of the hand elicits the extension pattern that is necessary to maintain the quadrupedal position. In almost every motor activity, when pressure is placed on the palm of the hand, the motor response being demanded is the extensor response. The purposeful motion is thereby facilitated with an automatic mechanism. This is seen in such activities as sawing, sanding, and pushing on the beater of a loom.

Similarly, traction on a joint in an extremity reflexly facilitates a flexor pattern in that extremity. Traction on a joint is usually brought about when the extremity is used to pull or lift an object. Compression facilitates an extensor pattern in an extremity. In each of these mechanisms the purposefulness of the responses elicited is evident. Conventional occupational therapy media can be analyzed in terms of these stimuli. When the saw or sanding block or beater on the loom are pushed in order to accomplish a task, joint compression reflexly facilitates the movement required (extension pattern). Similarly, when the same saw, sanding block or loom beater are pulled, thereby creating traction on the joint, the reflex mechanism facilitates a flexor pattern, which is, of course, the necessary pattern for accomplishing the task.

Another example can be drawn from the neurophysiological investigations of Gellhorn. One experiment[4] involved the inter-facilitation of the muscles acting on the elbows and wrist according to the pronated or supinated position of the forearm. It was found that the muscles facilitated each other according to the functional demand made on them. That is, synergy altered when and according to the way in which the functional demand altered. In occupational therapy, motor activity is usually based on normal functional patterns of motion. It seems reasonable to presume that there is a therapeutically desirable interfacilitatory effect from utilizing patterns versus individual motions.

Such paralleling of reflexes and purposeful function is probably not accidental. Man has evolved, as was pointed out above, as a purposeful motor being, the neuromuscular mechanisms have resulted from functional demands and they thereby tend to facilitate that same function.

Even where reflex muscle contraction is an important aspect of neuromuscular training, purposeful functioning must be included for maximally effective results. In the therapeutic procedures developed by Rood for the treatment of neuromuscular dysfunction, an important aspect of utilizing cutaneous and proprioceptive reflexes is the following of the reflex motion with cortically controlled use of the movement.[7]

Observing the phenomenon of propositionality provides additional information about the functioning of the cortex in terms of effective accomplishment of a motor act as opposed to functioning in terms of muscle contraction or joint movement. Delecato[2] has described this condition and cited cases where emphasis on a conscious direction of motor acts resulted in poor motor performance while the same performance was considerably improved when the emphasis was placed on the goal of the activity rather than on the muscle functioning that led to the goal.

In orthopedic conditions physiological processes, in addition to those of the neuromuscular system, play an important part. It has long been understood that activity is necessary to prevent swelling, to maintain the functional position of the hand, and to improve or maintain normal circulation and range of motion. Bunnell[1] has pointed out the value of purposeful activity and described it as necessary to the "revivification of tissues" in orthopedic conditions of the hands. He early recognized the importance of coordinating the muscles with the cortical process of accomplishing an act. He has pointed out that sometimes the badly crippled hand becomes psychologically dissociated from the brain so that the brain actually inhibits neuromuscularly possible motions in the hand. In these cases Bunnell has recommended the type of therapy which automatically associates brain and hand through a goal involving both.

Ralston[6] has recently called to attention and briefly reviewed experiments showing that the brain is influential not only in the direct control of motor activity but also indirectly in the con-

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SOME OF THE APPROACHES TO PSYCHIATRIC THEORY

JOAN M. DONIGER, O.T.R.

In the past few years there has been some recognition that the theoretical basis for clinical practice in psychiatric occupational therapy is weak, contradictory or confusing.[1] It is certainly not the intent of this paper to construct new theory to replace the old. This would be an immense piece of work requiring the efforts of many people, many years, much imagination and more knowledge than is now available. In considering this problem, though, it might be useful to review the approaches to theory that are usually taken.

Teachers of occupational therapy have approached the basic concepts of clinical practice in psychiatric occupational therapy in a variety of ways.

By diagnostic categories. A common way of teaching theory is around diagnostic categories. Students learn the standard classifications of mental illness, how to distinguish them, something of their dynamics and so on. Then they are given an outline of activities specifically suited to each category of illness. For example, the notes of an "A" student from a well-known school of occupational therapy suggest that the activities suitable for schizophrenics should include simple stimulating short-term projects; that schizophrenics should be given creative activities and activities with repetition. Among the activities recommended for a patient suffering from hypochondriasis, on the other hand, are fairly active projects, so that the patient does not have time to dwell on himself, and activities which teach relaxation and play. Notes of students from other schools were quite similar to this.

The value of familiarity with diagnostic categories and their meaning is obvious. Occupational therapists must know the language of their profession, the language they share and employ in communication with doctors, nurses and others devoted to the treatment of the mentally ill. A great deal of information about such illness is conveyed in the language of diagnostic categories. But there are limitations to this approach.

Assuming diagnoses can always be made accurately and that each patient diagnosed as having the same illness is like every other, there is still no evidence that the particular kinds of activities recommended are therapeutic. Effectiveness claimed for these activities has not been demonstrated in any objective fashion. Moreover the assumptions of accurate diagnoses and uniformity of persons having the same illness are not strong, as any practitioner can vouch from his experience. Students fresh from courses in theory who are starting practice find patients who have varying abilities, tastes and characteristics which make one schizophrenic as different from another as he is from a patient having another diagnosis.

Since recommended activities for a diagnostic category do not consistently fit the patients' needs, the theory has limited applicability in clinical practice.

By symptoms. Since the diagnostic categories are not always descriptive of patients' behavior and needs, a currently more popular approach to theory of activities is by symptom rather than diagnosis. Occupational therapy students are taught how to deal with hostile patients, fearful patients, depressed patients, and so on. Examples of this approach are found in standard occupational therapy texts, such as: activities suggested for withdrawn patients "should be simple, stimulating, short-term projects. Minimize the fear of the unknown." Those suffering symptoms of "internalized aggression" (guilt) should be "given different activities from those being done by other patients."[2] Another text suggests that patients who are insecure and dependent would be suited by "an activity with which the patient is unfamiliar and which is varied to the extent that several new steps are involved in each process, thus making it necessary for the patient to be quite dependent on the therapist . . . The activities to be used are those involving soft, non-resistive material."[3] A later passage is more specific. For a depressed patient "ceramics was prescribed because it provided a good opportunity for extensive guidance and direction, was non-resistive, and because the therapist could devote considerable time to the patient and the project, minimizing the chances of failure, and the necessity for decision on the part of the patient."[4]

While it may be easier for the novice therapist to determine whether a patient is aggressive or withdrawn than whether he is schizophrenic or a manic-depressive depressed, the theoretical approach via symptoms is hardly more useful than the diagnostic category. Hostile patient *A* is quite unlike hostile patient *B*.[5] They become hostile by different routes, in response to different stimuli or dynamics. They have different modes of expressing the symptom and there are alternative ways of treating it. Furthermore, different

doctors have different treatment objectives. One may wish to encourage full expression or release of hostility, and another desire to have his patient (or even the same patient) learn control of it. The same doctor at different stages of illness may have different treatment goals in terms of expression of symptoms. Beyond this, however, symptoms, like diagnostic classifications, seldom describe the patient entirely. The symptoms rarely appear in textbook purity of form and sometimes treatment of them is found to be futile. In these cases the symptoms are superficial or ephemeral and successful treatment of them merely results in the development of new symptoms of an underlying illness which remains untouched.

By chronology. A third approach to the concepts of clinical practice is through history. Going back as far as biblical times, students learn that activities, particularly work, have been considered therapeutic for the mentally ill. The first sentence of a well-known occupational therapy text starts: "Ancient records inform us that the Egyptians utilized music and games . . . to assist in the recovery of mental patients. David, of the Israelites, as a youth played the harp to tranquilize the soul of King Saul."[6] The author continues to describe the uses made of activities throughout history.

Attempts to convert the recognized values of activities into a therapy and a formal professional discipline were not made until modern times. After the First World War occupational therapy became organized into a recognized profession. What passed for theory at that time now seems vague or naive. There was an idea, for instance, that giving depressed patients bright colors to work with would cheer them up.

By the end of World War II such advice appeared to be inane and "unscientific." At that time there were strenuous attempts made to have occupational therapists work "scientifically." Evidence of advances toward this goal was the great reliance placed on the prescription of activities, ideally as precise and correct as other prescriptions in medicine.

Currently the use of prescriptions for activities is being criticized as useless if not impossible.[7] It is suggested that the role of the prescription oversimplifies the activity situation and limits the role of the therapist to that of a technician.

It may not help a practitioner directly to know that the work he does today would have been done very differently ten years ago, more similarly fifty years ago, not at all five hundred years ago, quite well thousands of years ago in some civilizations. Approaching theory historically, however, provides some valuable perspective, flexibility of outlook, and scepticism or humility.

By philosophical school. Basic concepts of psychiatric occupational therapy may be viewed against those of psychiatry with which they ought to be consistent. Psychiatry, however, has no universally agreed upon basic concepts. "One of the most conspicuous features of psychiatric history is that it is totally different from medical history. Psychiatry still lags behind medicine as to the certainty of its task, the sphere of its activity, and the methods to be pursued. General medicine . . . never had to ask itself what disease is. It always knew what it meant to be ill, for both the patient and the doctor knew what pain and other forms of physical suffering were. Psychiatry never had such a clear criterion of illness . . . After more than two thousand years of medical history, neither psychiatry nor the public has yet reached any understanding of what mental illness is."[8]

The lack of a single synthesized theory of psychiatry means that occupational therapists must learn the theories of divergent schools of thought in psychiatry. Familiarity with the teachings of many different proponents of the psychodynamic approaches as well as those of the organic approaches to psychiatry is essential if therapists are to work successfully with the doctors who adhere to one or another school of thought.

It is because psychiatry is so diverse and so inconsistent in theory that the previously described approaches to a basic concept of practice have demonstrated shortcomings and contradictions. Doctors' different objectives for occupational therapy, which have been described in the preceding section, arise from the different theories they hold. Contradictory instructions for handling the same patient in an activity program are also reflections of varying philosophies.

It is possible for an occupational therapist to work simultaneously with:

1. A doctor who believes strongly in the value of reconditioning and retraining, a member of this "push-it-in" school who wants to use activity to teach control, to retrain surface behavior or to provide social adjustment.

2. A doctor who believes in the value of self-expression, a member of the "pull-it-out" school who wants to use activity to provide emotional release, self-understanding or diagnostic clues.

3. A doctor whose interest in study or research or whose point of view is such that he advocates the "leave-it-alone" school so that he may

observe what forms the patient expression takes without trying to influence it in any way.

The study of the theory of psychiatric occupational therapy is made far more arduous and abstract when the material is presented according to schools of thought, rather than in ways previously described. But the knowledge thus obtained leads to resolution of contradictions which confuse occupational therapists as they start practice. This is because the treatment objectives are understood in terms of underlying theories about them.

As a footnote to the remarks about theory for occupational therapy approached from the point of view of philosophical schools, mention might be made of a particular twist in occupational therapy theory which has arisen from the psychodynamic approach to psychiatry. Insights obtained from study of this approach have led many occupational therapists to an increased appreciation of the interpersonal aspects of their work. Occupational therapy students are taught that not only does the activity have potential therapeutic values but the relationships between the therapist and the patient may also be an important source of therapy. Strong proponents of this theory tend to de-emphasize the significance of the activity, claiming the activity is only the "bridge to the relationship."

This can lead to difficulties. Though it is true that an occupational therapist is as effective as he is an aware, intelligent and warm person, these are all personal traits and cannot be taught in the usual sense. Furthermore this approach raises the question of what the competent talented occupational therapist has to offer the patient over the competent nurse or social worker, if the activity itself is not his unique contribution to the patient's life. And how is the occupational therapist who does not think in terms of activities and their special meanings to patients going to be able to plan and run a program.

The approaches to theory of psychiatric occupational therapy which have been outlined here are neither exhaustive nor mutually exclusive. Each teacher makes his own selection among these and other approaches. There is still a long way to go in order to evolve a satisfactory analysis of the principles contained in the set of "facts" and ideas that currently make up psychiatric occupational therapy. And if occupational therapy were clear about its goals there would still remain the work of finding out if participation in activities does, in fact, what it claims to do.

One of the difficulties seems to be that sometimes occupational therapy has attempted to go further than the present state of psychiatry warrants. As long as occupational therapy, in common with other therapies, is limited by lack of knowledge about the nature of mental illness and the effects of activities on behavior, it does not seem to be useful to formalize and chart the kind of information which does not yet, and possibly never will, lend itself to formulas and charts.

Within the limits of present day knowledge, it might be a step forward if some thought were given to what the boundaries of the field really are; if current theory could be re-ordered; if the primary aims could be separated from secondary ones; if the underlying and implicit hypotheses about the objectives of different therapies were made explicit; if the feasible could be sorted out from the unrealistic or only rarely achievable.

The problem of how to teach, or more difficult yet how to formulate, occupational therapy theory has baffled thoughtful teachers and practioners in the field. This paper presents no solution to the problem. Its purpose has been to try to clarify the problem by reviewing some of the approaches which have been taken.

Editorial note: Material for this article is based on discussion with and a review of the school notes of twenty-one students from six schools of occupational therapy, as well as current literature.

REFERENCES

1. *Rehabilitation of Mental Hospital Patients.* Public Health Monograph U.S. Department of Health, Education and Welfare, p. 25. Azima, H. and E. D. Wittkower. "A Partial Field Survey of Psychiatric Occupational Therapy," AJOT, XI:1 (Jan.-Feb.) 1957. Goodrich, Mazer and Cline. "Problems of Fostering Psychiatric Patients' Involvement in Activities." *Psychiatry*, (August), 1958.
2. Willard and Spackman. *Principles of Occupational Therapy.* Philadelphia: Lippincott Co., p. 104-105.
3. Fidler and Fidler. *Introduction to Occupational Therapy.* New York: The Macmillan Company, 1954, p. 46-47.
4. Ibid, p. 48.
5. This point is greatly elaborated in an article by Doniger and Klopfer, "Attitudes in Psychiatric Activity Therapy, "AJOT, XII:5 (Sept.-Oct.) 1958.
6. Willard and Spackman. *Principles of Occupational Therapy*, p. 1.
7. Mazer and Goodrich. "The Prescription: An Anachronistic Procedure in Psychiatric Occupational Therapy," AJOT, XII:4 (July-August) 1958.
8. Zilboorg, Gregory. *A History of Medical Psychology.* New York: W. W. Norton Co., 1944, p. 519.

OCCUPATIONAL THERAPY IN A PEDIATRIC SECTION

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Picture 1. Pediatric occupational therapy is planned to encourage growth and development.

Occupational therapists recognize that children do not grow like "Topsy." The neurological and psychosocial processes of maturation provide the developmental pattern upon which a comprehensive treatment program can be planned regardless of the age of the child when hospitalized. (See Picture 1).

At one time small children in institutions suffered from lack of love and personal attention, although the physical care was good and the food nutritious. Some children were so traumatized by their experiences that scars were carried throughout their life; other children missed so much of their normal development that the gaps never closed and the lost experiences were never made up.

Not only must children have their physical needs met, but they need an atmosphere that respects a child's developing personality and acknowledges his social background. There is a basic pattern through which individuals develop. This basic pattern[1,2,5,6] has been carefully detailed in motor development, adaptive behavior and psychosocial reactions. These patterns, although varying within each child, provide the framework for a child's growth. An awareness of these sequences in child development enables the occupational therapist to plan a treatment program that will allow the child to progress within his developmental pattern. The therapist will also allow the patient to regress in order to stabilize some step poorly established through illness or social conditions. An occupational therapist has the ability and training to set up a program to meet the patient's needs within the hospital or institution that will assure the child's continued development.

Illness often distorts the known world of the child, making him dependent because of his physical helplessness, lonely because of separation from his family and familiar surroundings, and bored because physical activity is no longer a part of his life. To assist and help the child, play can be introduced which will divert him from pain, encourage his participation and give him a way of making the time pass (Picture 2).

Picture 2. Even the severely handicapped can partake in play activities.

Play[3] is the process which allows the physical and psychosocial development of the child. Play is used by the child to perform, develop and react. But because of physical limitations due to illness or restrictions within a hospital environment, adjustments in play materials may be needed. Small soldiers or cowboys and Indians, baby dolls to dress or undress, miniature blocks to build with—these may all substitute for the active play normally carried out in vigorous activity. Carefully selected materials that are safe, easily cleaned and practical for a hospital or institution to use, will be more successful than the hodgepodge of stuffed dogs, mechanical men and coloring books generously distributed by volunteers, toy ladies or other well-meaning members of the hospital staff. Under direction these groups may select the right toy for the

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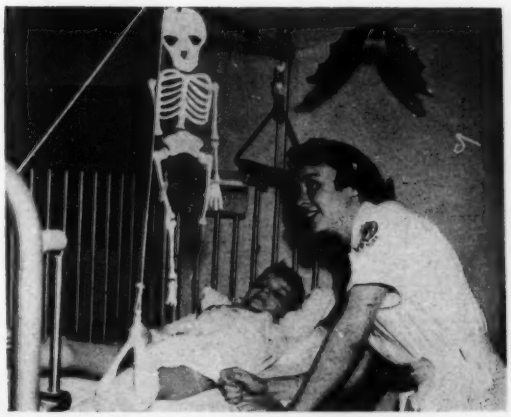
right child, but a coordinated program needs to be planned.

Institutions often have many female employees and contact with males is limited for both boys and girls. To offset this lack boys can be encouraged in crafts that seem mannish such as metal- leather- or woodwork and games that include competition and team spirit, as well as the opportunity to play with other boys their own age. Male companions can be obtained as volunteers or staff members. Chess is an excellent activity choice because of its warlike strategy, the

Picture 3. Children enjoy making puppets, writing plays and producing shows.

terminology used and the maneuvers that need to be planned to outwit the opponent. After mastering the game other players can be found who would enjoy tournaments, or famous games can be studied. Interest could be developed that will last a lifetime. In addition, hand carved chessmen or inlaid chess boards can be made. Other games like dominoes, checkers, pick up sticks, or India can also be used, as most boys like games and are willing and eager to play. Also most of these games require a minimum of physical activity and so can be used for children at rest because of positioning. Girls are often more satisfied with sedentary activities such as sewing or reading but they, too, need to have contact with men to develop an understanding of the male viewpoint. It is often necessary to indoctrinate the staff in the knowledge that girls are not better behaved than boys just because they are quieter and not as raucous as boys.

Children's activities should be in keeping with their development.[4] That is, before a child puts a model plane together he should be able to understand the activity. To plan an activity beyond the child's ability or comprehension is negating the value of the activity and frustrating to the child. This frustration coupled with the



Picture 4. Holidays Can Be Fun

strange environment of the hospital can be so traumatic to the child that growth and development can be impaired and it might even cause regression. Activities so simple as to be easily mastered are not challenging to the child and therefore not therapeutic or even diversional.

Many of the activities which consist of cutting, pasting, coloring, painting, simple sewing and weaving, and clay modeling give a background that will lead into the hobbies and skills of the later age groups, and can be up or down graded to the scope and capabilities of the individual. Budgets should be set up to include these materials rather than depending on kits, half-finished craft projects and expensive models. The older child will enjoy such things as papier mache, woodwork of apple boxes, or mosaics of grain and cereal as well as other simple handicrafts devised from scrap material. The homes the children come from generally do not have access to leather, ceramics, or electric saws, so crafts are often selected so that they can be carried on after the child has returned to his home. Children who show unusual talent and ability or those who have special needs can always have media planned for them. It would be good if these patients were taught how to begin and end a project, where materials can be obtained, and how to care for their tools and supplies. Children are one group of patients who are naturally and enthusiastically creative. They are motivated and stimulated by the therapist and the material itself to interpret happily the world about them. Puppetry is successful, as the story can be written, the puppets created out of available supplies, and there is always an audience for the show (Picture 3).

Holidays are part of a child's culture—a link with past, an experience in the present, and a pattern to be kept in the future. A holiday means fun, a break in the routine, and a celebration that everyone—nurses, doctors and pa-

Picture 5. A new found friend in the occupational therapy department.

tients—can join in together. It creates the feeling of a family, maybe a large one, but a situation where everyone feels the same about something. Christmas, with its elaborate preparations, is a good example; but other times, such as tricks on April first, Valentine's Day or even a birthday can be made into an event that will be remembered long after the "shots" or long stay in bed are forgotten. A holiday can be used as a reason to decorate, to have a party or to motivate a child into an activity, to make a gift for Mother's Day or to learn to sing a carol. One of the most exciting occasions is Halloween (Picture 4). What fun to put on costumes, no matter if it is over a clumsy cast, and appear as a terrifying ghost, a goblin or even a nasty witch to frighten and defy the adults who have demanded so much.

Nature projects are part of pediatrics and might include a little brown mouse with a delicate pink nose and wee pink toes (Picture 5). It is sometimes easier for a small child to have a little friend in his new world than an adult, especially when the adult is strange and dressed in starched stiff white. The new-found friend is especially comforting as he is interesting and different but not frightening, as he is so soft and warm and does such amusing things as crawling upside down, wiggling his whiskers, or curling his lovely long tail around. Children like to help take care of a pet and they feel a sense of responsibility in filling feed dishes, giving fresh water or sharing bits of toast with their charges. Many handicapped children who are dependent on others to care for them receive satisfaction in the assignment of "mouse care." Some children are so limited in their environment and experiences that this might be the first time they have been in contact with an animal, which will lead to all sorts of questions: What does he eat? Where does he sleep? Can he hear me? May I touch him? And so a narrow world widens a trifle. Then, too, cages can be built, stories read about animals, life processes studied and pictures drawn. Pictures come easily when they are portraits of a friend. Any pet will do—hamster, turtle, fish, ant houses, or even a borrowed rabbit from the hospital laboratory.

Many plants will grow accommodatingly in flower pots. Besides making wonderful gifts to send home, how reassuring it is to know that a tiny seed will sprout, poke up through the dirt to become a plant. Institutions are often located with high windows that look emptily down into

Picture 6. Keeping a weather chart can be an activity for several. This especially interests boys who can further their knowledge during their reading period.

barren streets or on other buildings, so how is it possible to know when the grass is green or the trees in leaf? Weather charts, including daily temperatures, wind direction, precipitation, keep a child informed on season changes as well as the forces of the elements (Picture 6).

Indeed the play area for children is limitless but must be geared to their chronological and social development. When an infant needs to develop grasp, play activities are planned to encourage this. When a child needs to identify himself with his parents or other adults of the same sex, he can imitate them through his play schedule which can be adjusted to encourage this development stage.

Play,[3] to a child, is never diversional or senseless, but rather a series of challenges which he will enjoy and accept only if planned within the scope of his development from one state of maturity to the next. These sequences of growth patterns toward maturity follow a basic pattern dependent on biological development. These levels of growth remain essentially constant and

readiness for a given stage of maturity must be recognized and met in the child on the pedatric service.

In probably no other phase of occupational therapy is a planned activity more vital. A child's illness may hamper him but never impede his need for growth without endangering his future development toward maturity.

Successful experiences in relationships with other children are necessary to insure ego growth. One of the strongest human drives is to live together harmoniously, but it must be experienced and practiced to be developed. Even in a hospital group activities can be planned where children play together, babies are often stimulated when they are exposed to children of all age groups, "taking turns" can only be learned with others, sharing becomes necessary when there are others to share with and recognition of a skill from a peer is far more meaningful and satisfying than from an adult. Acceptance of a handicap is sometimes easier if it can be compared to other disabilities, and it may be accepted after more severe problems are observed, and most children will find inspiration in watching the progress of others and seeing their courage in overcoming difficulties. Some may have enough feelings left over to help those less fortunate than they by including them in their games or just being a friend. Story telling is far more satisfying with audience participation than just listening to the radio or watching television (Picture 7). Singing games or action songs can usually be adjusted so all can have a part, and puppetry can be creative activity for those partaking (Picture 3) and those watching (Picture 8).

Picture 7. A good story teller can always be assured of a receptive audience.

A place in an institution that belongs to the children is a necessary part of a pediatric program. Here war can be waged complete with toy guns that go "Bang," housekeeping can be set up with tea pots and stoves to cook on, and buggies to wheel around. Messy noisy play, so much a part of childhood, can be indulged in without upsetting hospital routine—rhythm bands with their accompanying din, water play with its damp aftermath, forts of blocks that tumble down with a shattering crash. To the child it is not chaos but a way of learning to identify himself, but in his own setting. Good storage can solve the clutter, adequate space will insure a better play space for the various activities, and with many of the children taken away from the wards, nursing care will be much smoother. Dangers of cross infections can be minimized if adequate precautions are taken.

Picture 8. A puppet show can be fantasy which stimulates imagination or be based on life experiences for broadening concepts.

Any activity, if chosen for a child's developmental level as well as his interests, may be used therapeutically. A child's behavior can be observed during his play. Is he able to follow the rules of the game? Does he keep his place or know whose move it is? Can he count score? Who does he choose to play with? Does he finish the game? Does he cheat? Does he have fun when he plays? These pertinent facts will give clinical information on the child's reaction, both physical and emotional. A doctor might request observation of a child's behavior during the course of medications. Is the child more alert today than he was yesterday? Is his speech understandable or is it slurred? What is his attention span? Is he different from what he has been? No one else in the hospital has the opportunity to make these observations as well as the occupational therapist, as he can create a natural situation, understand what he is watching for and is able to record his findings in precise medical terms for those concerned.

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EFFECTS AND CONSEQUENCES*

Criteria for the Evaluation of Professional Preparation

ELEANOR METHENY, Ph.D.†

Guiding students through the formal education which qualifies them to enter our own professional ranks is a rewarding undertaking. It is also a highly dangerous one. If we do it well, our profession is benefited by a continual influx of capable and enthusiastic new practitioners; but if we fail in our assignment, the wellsprings of our profession soon run dry. It is desirable, therefore, that we continually examine the effectiveness of our teaching procedures.

Obviously, the immediate effects of our instruction are manifested in the technical competence our students display in their first professional assignments. But just as the dictionary differentiates between "effect" (the immediate result) and "consequence" (the remote outcome), so must we differentiate between techniques and the consequences of the ways in which those techniques were acquired. For it is in the realm of consequences that the danger of poor professional preparation lies, and the source of that danger is in us.

During a highly critical period in the lives of those who will carry on our professional work we are entrusted with almost absolute authority over them. Because we hold the key to the only door that can admit them to the life work they have chosen, our approval is essential to them. In this situation, our students sometimes confuse means and ends. Winning our immediate approval may at times seem more important to them than their eventual professional growth; and because we too are only human, we too may at times suffer from this same confusion. In our concern for immediate technical competence we may overlook the consequences of meticulous carrying-out of directions. Our desire to have them "do it right," which of course means "do it exactly as I would do it," may blur our awareness of the consequences of not understanding the basis upon which "my way" rests. Unwittingly we may use our authority to drive them to commit what T. S. Eliot has called "the greatest treason." They may "do the right deed for the wrong reason."

If we allow our students to make winning our approval or avoiding our displeasure their primary motivation, they may become very proficient in using techniques. But if they have no real understanding of the reasons for selecting those techniques, their professional lives are in mortal danger. They are on the way to becoming technical robots whose acts are governed only by the voice of authority—our authority. But, as the history of knowledge clearly shows, nothing is more vulnerable than an authority; and any profession manned by technicians whose practices rest solely on authorities of the past is soon reduced to a body of rules and procedures which in fifty years will be fifty years behind the times. We who guide the learning of the professional practitioners of the future must be continually on guard to root out "the cause of this effect, Or rather say, the cause of this defect, For this effect defective comes by cause." (Hamlet II, 2.)

Certainly our immediate responsibility is to teach students to do the job our way—which is the best way we know at the moment, but this is not enough. Progress comes from someone differing with me—and being right. If we want our profession to move forward instead of backward, we must lay the foundation for such differing. We must teach current practices in such a way that our students will eventually dare to discard them in favor of better techniques which they, themselves, will develop. To plan for our own obsolescence is a difficult assignment for us human beings with our touchy egos. It is tempting to induce our students to pattern themselves after us, to cause them to develop in our own image. It is difficult to give them the freedom they need to develop in their own images, which may be far better than ours.

Our own competence must be used to provide a structure which will support them during their early performance of professional tasks, but this structure must be only a temporary scaffolding, not a cage. Even as they lean on it, they must feel free to question its adequacy. "Why?" "What is the general principle?" "On what scientific evidence is this practice based?" Asking and answering these questions will lay the ground-work for their own professional competence.

As they acquire knowledge and understanding, we must allow them to use it. Only by accepting responsibility for making decisions and acting on those decisions can they develop faith in their own judgment. (Of course we must over-rule them if an error in judgment is likely to prove catastrophic, but even then we must

*Adapted from a talk presented at the clinical affiliation council meeting at the University of Southern California, May 9, 1958.

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be sure they understand the reasons for our intervention.) If we want them to become professional persons, capable of thinking for themselves, they must be permitted to function as professional persons within the limits of their present knowledge and understanding.

Competence in the performance of currently accepted techniques is necessary, but it is only a means and never an end in itself. "We all need some imaginative stimulus, some not impossible ideal such as may shape vague hope and transform it into effective desire, to carry us year after year, without disgust, through the routine work which is so large a part of life." (*Marius, the Epicurean* by Walter Pater) Repetition of a familiar technique is not, in itself, such a lasting stimulus. The tinder which can keep the spark of enthusiasm burning during routine utilization of effective techniques is the belief that there is always a better way to accomplish the same purpose, and that we are capable of finding that better way. It is our job to instill that belief. We must somehow convince them that all knowledge in their professional field does not reside in us, that our understanding is not infallible. In short, we must expose our own vulnerability as authorities to encourage them to dare to differ with us, and perhaps be right.

As a consequence of effective preparation our students should eventually transcend our teaching and accept the responsibility for doing their own thinking and experimenting as they attempt to improve the profession they have accepted as their own. The old authorities should, in time, be forgotten. They should no longer be needed, no longer quoted, because a new generation of authorities will have matured to replace them.

If we do our jobs effectively we shall be forgotten as authorities, but we shall be remembered as we remember our own great teachers —as persons, as co-workers whose concern for our own professional growth was consequential in our lives. Our students will remember us, not because we gave them the final answers, but because we insisted that they ask questions; not because we gave them a finished product, but because we entrusted them with the responsibility for improving the product our own lives had helped shape.

If we can find it in ourselves to do our jobs effectively, then we can approach retirement with serenity when our own days of professional responsibility are over, because we will have handed on to the next generation the catalyst which transforms technicians into professional leaders, and we can rest assured that the future of our profession will be safe in their hands.

Physical Disabilities . . .

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trol of sensation. It appears that the purposeful task which is engaging the cortex is important in determining which sensations are allowed to act on the motor output. It might well be that the emotional role of interest and satisfaction in an activity have a definite neurophysiological role in motor function. Advancements in neurological knowledge merely hint at the great importance of the total therapeutic situation. Occupational therapy is in a responsible position for controlling the conditions that, first, provide the desired afferent stimuli and, second, influence the use made of the stimuli. Lack of fully effective use of this principle lies not in the limitations of occupational therapy but in the fact that knowledge of the principle is still in the early stages.

PURPOSEFUL FUNCTION MUST BE UTILIZED FOR MAXIMUM REHABILITATION

A comprehensive overview of all known factors relating to the function of the motor system points directly and inevitably to the necessity of considering purposeful activity. It also points to the fact that controlling purposeful activity for maximum therapeutic results is a highly difficult task necessitating comprehensive scientific understanding of all aspects of motor behavior, including associated visual and intellectual processes.

There is no doubt but that large unexplored areas of knowledge, perhaps as yet unrecognized in importance, exist. They await investigation through research which will provide a firm scientific basis for occupational therapy where now exists only theoretical—in fact sometimes only almost intuitive—foundations.

REFERENCES

1. Bunnell, Sterling. "Occupational Therapy of Hands." *American Journal of Occupational Therapy*, 4:145-153, 1950.
2. Delecato, Carl H. "Hemiplegia and Concomitant Psychological Phenomena." *The American Journal of Occupational Therapy*, 10:157-172, 1956.
3. Fay, Temple. "The Origin of Human Movement." *The American Journal of Psychiatry*, 3:644-652, 1955.
4. Gellhorn, Ernst. "Patterns of Muscular Activity in Man." *Archives of Physical Medicine*, 28:568-574, 1947.
5. Gesell, A., Ilg, F.L. and Bullis, G. *Vision: Its Development in Infant and Child.* New York: Harper and Bros., 1949.
6. Ralston, H. J. "Recent Advances in Neuromuscular Physiology." *American Journal of Physical Medicine*, 36: 94-120, 1957.
7. Rood, Margaret. "Neurophysiological Reactions as a Basis for Physical Therapy." *The Physical Therapy Review*, 34:444-450, 1954.

PROFESSIONAL TEACHING IN A REHABILITATION CENTER

MARGUERITE ABBOTT, M.A., O.T.R.*

The formal professional teaching pattern, as seen in the various segmented disciplines of medicine and its associated medical-social professional services, is a very familiar one to the occupational therapist.[1]

Prior to the present-day concept of rehabilitation, the medical profession was concerned with its major function of studying the cause and effect of various disease entities without too much emphasis or focus upon the emotional and cultural components of the patient.

Gradually, modern medicine broadened its horizons, and such ancillary professions for improved rehabilitative patient care as socio-psychiological, physical and occupational therapy services took their place and rounded out the full circle of the total rehabilitation pattern. Thus, a concept of total rehabilitation for the handicapped emerged, and we now have a three-goal basic formula of physical restoration, socio-psychological adjustment and vocational rehabilitation for the client.

This then brought us to a point where the scope of medical professional teaching was broadened by enlarging its basic core curriculum in the physical and social sciences, to provide integrated training for the many professional specialists in the field of medicine now required to carry out total comprehensive treatment for the patient.

By rehabilitation teaching we mean formal and clinical teaching in both the physical and social sciences. The service program of the present-day rehabilitation center maintains an extensive professional teaching program whose goals are, or should be, community centered, for its social and economic welfare.

The rehabilitation center has a responsibility to utilize its equipment and personnel for research and teaching purposes. Its comprehensive treatment facilities and diversified professional personnel are conducive to clinical practicums and medical-clinical affiliations which amplify and demonstrate the various theories of rehabilitation learned in the formal classroom of the university setting. It is to be remembered that rehabilitation is everybody's business and is not the exclusive prerogative of any one discipline or professional group in medicine or its associated fields.

If patients are to receive maximum benefit from services, it is essential that the basic philosophy of the educational program in the rehabilitation center be accepted by those who contribute to its professional teaching efforts. Rehabilitation teaching, or teaching in any discipline, to be an effective tool, cannot be a hit and miss affair. Good and effective teaching programs at any level demand thoughtful, planned teaching by competent and able personnel who are oriented to the needs of the students and patients they service.

Rehabilitation teaching needs an inter-discipline exchange of teaching personnel, with the goals and objectives of both the university and rehabilitation center well defined and clarified. The university cannot take over the task of rehabilitation teaching as a primary function, but rather finds its proper contribution in training medical specialists in the field related especially to the restoration of the handicapped to useful lives.

The implementation of a basic philosophy within the joint framework of a university and a rehabilitation center requires teaching leadership of high calibre, and a staff competent and willing to teach within this framework. Such leadership may be recruited from several sources: from strong existing departments, from the teaching institution itself or from personnel properly trained and oriented in the basic philosophies of both institutions concerned. Good rehabilitation teaching requires basic organization procedures and processes and total orientation of the teaching staff to the needs of the community and the patient.

An excellent pilot study has recently been made of twelve medical centers which were the recipients of a grant from the National Foundation for Infantile Paralysis, and which recently held a conference in Bandera, Texas,[2] on the teaching of rehabilitation.

Some of the problems considered and discussed at this conference were:

1. How do we teach the concept of rehabilitation to an interdiscipline faculty.
2. How does one encourage the physician to discuss patient program planning with associated personnel.
3. How shall we reinforce the present undergraduate and graduate professional programs in rehabilitation in view of the already crowded curriculum.
4. How can we better use community resources for teaching purposes.
5. How can we develop better communication and understanding in our interpersonal relations.

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Some of the suggested recommendations were:

1. Develop strong teaching leadership, with a knowledge of the philosophy and services of rehabilitation.
2. Place responsibility and authority in one person, to serve as a qualified coordinator.
3. Appoint an inter-departmental or university-wide committee responsible for plans and policies, with whom a coordinator or director of professional education in a rehabilitation center can work efficiently and freely to develop an educational program.
4. Expand the use of community resources for interdiscipline teaching.

Much exploratory and pilot work needs to be done in this new field of rehabilitation teaching, and offers a very real challenge to the occupational therapist and other educators concerned in this area. A superficial fact-finding survey of rehabilitation centers in the United States has been made[3] to ascertain the kind of rehabilitation teaching which is presently being done in various centers, and under what medical-professional aegis it operates.

It was found from this survey that present rehabilitation teaching included all of the various professional disciplines at different levels, in many mosaics and patterns of teaching, curriculum content and administration. This study indicates that the need for coordination of academic organization and actual practice in a health agency is indeed very real.

In this day, in a world of narrowed perimeters and continuing enlarged scope and integration of medical-professional teaching, we need occupational therapists with broadened vision, courageous minds, incisive analytical power and an imaginative grasp of the future professional teaching opportunities and needs in our field.

"Occupational therapists as members of a profession must possess a body of knowledge which is identifiable and different from other professions. They must also assume responsibility for adding to that body of knowledge and for developing standards of education and practice."[4]

Again it is to be emphasized that professional teaching in the rehabilitation center includes not only the teacher engaged in the didactic formal educational field, but very definitely it includes the practicing occupational therapist who implements the knowledge by practical clinical application. We, as therapists, might well take as one of our credos the philosophy of that great medical educator, Dr. Abraham Flexnor, who said, "I want to influence in some measure the life of my time insofar as it can be done through education."[5]

Thus the practicing occupational therapist should consider himself not only as a clinician but also as an educator, with the responsibility of keeping abreast of the ever-widening frontiers of our medical professional knowledge.

REFERENCES

1. Worthingham, Catherine. "The Future of Physical Medicine." *American Journal of Physical Medicine*, December, 1957.
2. National Foundation for Infantile Paralysis. *Conference on Teaching of Rehabilitation.* Bandera, Texas. New York: N.F.I.P., February, 1957.
3. Abbott, Marguerite. *A Survey of Rehabilitation Centers Having Professional Courses.* New York: Columbia University, Nov., 1957 (Unpublished).
4. Ibid 3.
5. Flexnor, Abraham. "Flexnor at Ninety Charts a New Course." *New York Times*, November, 1956.

Pediatrics . . .

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Some children may need strenuous physical activity to determine or to increase endurance, to ventilate emotions, or as physical treatment for body chemical reasons. Activity can be obtained through games like badminton, ping pong, volley ball or even long walks, or it may be confined to small areas and include bean bag, hop scotch, or jumping rope. Other children with physical handicaps may need to practice their newly acquired skills of crutch walking, using a prosthesis or even manipulating a wheel chair in situations that will motivate a child. The child learns his limitations as well as the many things that he can do.

SUMMARY

Occupational therapy in a pediatric section acknowledges the basic pattern through which a human develops and utilizes an activity program to encourage these sequences within the physical limitations of the patient.

Although individual development will be influenced by (a) inherited physical and emotional potentialities and (b) social and cultural factors, the readiness for a given stage of maturity must be recognized and met with play planned within the restrictions of illness or disability.

REFERENCES

1. Gesell, A., M.D. and Frances Illg, M.D. *Infant and Child in the Culture of Today.* New York: Harper and Bros., 1943.
2. Bakwin and Bakwin. *Clinical Management of Behavior Disorders in Children.* Philadelphia: W. B. Saunders Co., 1953.
3. Hartley and Goldenson. *The Complete Book of Children's Play.* New York: Thomas Y. Crowell Co., 1957.
4. Kawin, Ethel. *The Choice of Toys.* University of Chicago Press, 1938.
5. Rand, Sweeney and Vincent. *Growth and Development of the Young Child.* 5th ed. Philadelphia: W. B. Saunders Co.
6. Gesell, A., M.D., and Frances Illg, M.D. *The Child from Five to Ten.* New York: Harper and Bros., 1946.

PROPOSED REVISION OF THE PROFESSIONAL EDUCATION OF OCCUPATIONAL THERAPISTS*

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SPECIALIZATION IN OCCUPATIONAL THERAPY

Throughout all branches of the medical field it has been found most effective for medical personnel to specialize in the treatment of a limited variety of disabilities, rather than to attempt to encompass the entire range of medical practice. So, too, in occupational therapy it has been found most effective for therapists to specialize in the treatment of a limited variety of related disabilities. Advances in all fields are occurring with such rapidity that it is impossible for any one person, however able, to be qualified equally to treat all types of patients. Some specialization is perforce essential[1] if the individual professional person hopes to keep abreast of current developments. The trend toward specialization gives promise of a growth and development in the profession of occupational therapy which will result in the ultimate improvement of service to the patient and in the more effective use of the particular skills of each therapist.

The education of the occupational therapists presents a picture of sudden expansion after many years of steady growth which involved a relatively few persons and schools.[2] Of the thirty universities and colleges offering such programs, the majority have a graduate school, and all but two colleges offer at least one type of master's degree. The two schools which at present offer no degrees beyond the bachelor's level are both undergraduate, women's liberal arts colleges. It would seem that the granting of a graduate degree in the latter institutions need not constitute an insurmountable obstacle, since comparable institutions throughout the country offer a limited number of degrees at the master's level while, at the same time, retaining their essentially undergraduate, liberal arts character. Two-thirds of the schools are part of institutions which contain an accredited medical school or an approved school of basic medical sciences, i.e., the first two years of medical school. This indicates that the majority of schools are part of educational organizations in which a close cooperation with a medical school is feasible.

It would appear that occupational therapy was originally conceived as an arts and crafts program in a medical setting, rather than as a form of medical treatment for patients with physical and/or mental disabilities. The original concept was carried over in the establishment of the educational programs as a part of various colleges and universities. Consequently, a number of occupational therapy departments were established within schools of education, or departments of art or home economics. Such affiliation is inappropriate unless there is a concurrent affiliation with a medical school. The more appropriate position for the curriculum within a college structure is that of a separate department. Within a university, the curriculum is best administered as a member of a group of health professions, for which there exists a separate school for the education of allied medical personnel.[3]

EDUCATIONAL PROGRAMS IN OCCUPATIONAL THERAPY

A curriculum in education for a profession typically includes instruction in (1) the techniques and knowledge employed directly in rendering professional service, and (2) the basic sciences and other subjects whose mastery is essential to understanding and learning the techniques and professional subjects. Provision is also made for at least a minimum of instruction in the liberal arts and sciences, either in the professional curriculum or as a requirement for admission to the professional curriculum.[4] The trend in higher education to combine liberal arts with the courses required for professional education has occurred in the curriculum in occupational therapy, and the contribution of such a program, both to the individual student and to the entire profession, has resulted in the wholehearted acceptance of this type of educational preparation of the therapist.

The current training of occupational therapists is given at the undergraduate or at the postcollegiate level. The postgraduate, or "certificate" program is offered to persons who already possess a bachelor's degree, and who present certain required courses in basic science, in the social sciences, in psychology and in the skills. This program is seventeen or eighteen months in length, requiring two semesters of academic work which is then followed by at least nine months of clinical affiliation.

For the undergraduate program, four years is considered to be the irreducible minimum of time required for the course which must encompass basic science, liberal arts, study of the medical conditions treated, proficiency in the skills used as

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treatment media, and clinical practice. In actuality, all the present programs are four and a half to five years in length. In addition to the requisite curriculum in the liberal arts and sciences, the undergraduate student is presently required, in accordance with the standards of the American Medical Association, to complete sixty-four hours of professional study, and then to serve a minimum of nine months in clinical affiliation.[5]

As the curriculum has been modified each year to include a wider range of subjects, there has not been a comparable deletion in the number of courses to maintain the appropriate balance of semester hours, and the course load for students has become heavier with each revision. It is apparent that courses cannot be added indefinitely to the program without considering the necessity for a drastic revision of the entire educational preparation of occupational therapists and a marked change in the educational program is indicated at the present time.

Schools of occupational therapy have been a part of colleges or universities for a period of about fifteen years. It is notable, therefore, that 79.7% of all registered therapists have at least a bachelor's degree, and furthermore that 91.5% of the total group have had some form of higher education in addition to the specialized professional training. The largest number of therapists, 50.3% of the total group and 48.1% of the working group, is composed of graduates of the recently instituted undergraduate programs. The next largest group of registered therapists, 27.7% of the total and 29% of the working group, is that of persons who had already graduated from college prior to entrance into the specialized training.

EVALUATION OF THE PRESENT UNDERGRADUATE EDUCATION PROGRAM

The specialist, in order to be truly effective in his specialty, must have a broad fund of general knowledge and a wide acquaintance with other ways of thinking. The scope of occupational therapy today demands that the student have a broad social and cultural background which will enable him to view all aspects of health and disease within their proper framework. He must also have a sufficient acquaintance with various methods of thinking so that he is able to utilize the most effective means of attacking the problems with which he will be confronted as a therapist.

It is obvious that occupational therapy education depends upon a sound, pre-professional education for the student. The general, or liberal arts, education must foster the development of self-reliance, resourcefulness and intellectual maturity. There is general agreement that the most important requirements for admission to the program are effective personality, ability, a mind prepared by a sound plan of general education and a grasp of the principles of the sciences upon which therapy is dependent. Schools should avoid prescribing training in such a way as to prevent the development of intellectual self-reliance and broad cultural interests in the student.[6] The task of university education is, according to Sigerist,[7] to help the student develop his ability to think independently and critically, so he may form his own judgments. It must, in essence, lay a solid educational foundation for the professional specialization. The method of attaining this in any profession is only by building on liberal education, and the liberal education must be of sufficient length that the student is able to acquire the basic intellectual tools so he may realize his potentialities in the profession.

The present undergraduate program in occupational therapy provides a modicum of liberal arts education for the student. In actuality, his scope is rather limited, for he is required by the professional school to take those subjects, psychology, sociology, and biology, which are considered to have a direct bearing upon the later professional education. In addition, the college requirements for undergraduates demands the inclusion of English courses and usually a foreign language in order that he may qualify for the baccalaureate degree. Thus, the student in his so-called general education program is rather stringently limited by the professional requirements, and his schedule allows little time to pursue courses which are of personal interest to him and which would be of undoubted value in widening his cultural horizons and in developing his intellectual self-reliance. The undergraduate occupational therapy student, after two years of a markedly restricted liberal arts program, is shunted into a highly specialized theoretical and technical program which serves as a direct preparation for the profession. His preprofessional education, however, has been neither of sufficient breadth nor depth to provide him with the ability to generalize, synthesize and rationalize this highly specialized knowledge. He is thus prone to look upon each course in the curriculum as a separate entity and to learn the content by rote, instead of being able to view all the courses as inseparable components of the total program in occupational therapy. Throughout his undergraduate years the student is still striving to acquire the basic intellectual tools which he needs to realize his potentialities, but the professional program which he is under-

taking demands that he be intellectually mature at the time he commences specialization.

It seems axiomatic that prospective therapists who are of greater maturity than an incoming freshman class will derive greater benefit from the educational program, for they bring more advanced intellectual skills to their training. The college graduate group also tends to remain active as therapists for a longer period than the undergraduate group in positions of leadership and responsibility in the profession. The profession, consequently, is hindered in its full development because there are not sufficient numbers of its members qualified to promote the potential which exists in the particular area of medical specialization, and the end result is that service to the individual patient and to the community is presently inadequately realized in terms of the actual potential which exists in occupational therapy.

RECOMMENDATIONS FOR THE UNDERGRADUATE CURRICULUM

The growth and development of occupational therapy in the past few years, and the indications for the future of the profession, demand that the pre-professional educational program be that of a four-year, undergraduate, liberal arts curriculum. The particular undergraduate departmental major is not considered to be of especial import, since it is the total program of liberal education which is considered to be the essential. Each student who anticipates entering into the specialized program should, however, present in undergraduate credits at least six semester hours in psychology, six in the social sciences, and a minimum of six in the basic sciences, preferably biology. He should also present competence in at least three skills, such as may be acquired in departments of fine arts, music, horticulture or home economics. None of these requirements demands of the student any more in the selection of undergraduate courses than is presently demanded by the group requirements in the liberal arts program.

It is further recommended that specialization in occupational therapy be eliminated at the undergraduate level, since it is considered to be thus inappropriately placed on the educational ladder. It is to be expected that elimination of the undergraduate program in occupational therapy will be a gradual process, geared to the specialized character of each of the existing schools.

If it is believed advisable, it should be possible, for the truly exceptional student to be admitted to the program in occupational therapy at the end of three years of general education. The fourth and fifth years would be essentially a program comparable to the present certificate course, and the student in effect would be accelerating his educational program. For the outstanding undergraduate this program would then be no longer than the presently existing programs which award the bachelor's degree in occupational therapy.

In answer to those who consider that the above recommendations would have a destructive effect upon increasing the number of therapists, it should be sufficient reminder to note that the elimination of the three year diploma course in favor of the two programs currently in existence, caused no decrease in the number of persons entering the field and, instead, has undoubtedly increased the number of persons. Procedures comparable to those used in eliminating the diploma courses can be followed in order to achieve the revision which is currently recommended.

EVALUATION OF THE CERTIFICATE PROGRAM

Examination of the program for college graduates at a typical institution[8] shows that these students complete in one academic year twenty-four semester hours in didactic courses covering the basic medical sciences, the pathology of diseases, and the theory of occupational therapy. It is obvious that these students carry in didactic courses alone a program comparable to the full-time program of the average graduate student. However, the cerificate student must carry, in addition, seventeen semester hours of courses in the various technical skills which are the essential "tools" of the occupational therapist. All of these latter courses are taught as laboratory courses, which means that for each hour of credit the student spends two class hours in the laboratory or shop. In a single academic year, then, the certificate student spends about thirty hours a week in the classroom and laboratory. This is far in excess of the number of class hours required of any other program at the postgraduate level with the exception of the medical school, and it approximately equals the latter. The student also spends nine to ten months in clinical affiliation after completing the academic work, and during this time he is working an eight-hour day, five days a week. None of the time schedules described thus far take into account the considerable number of hours which are required throughout the eighteen months program for study, for written work and for class preparation.

Upon satisfactory completion of all phases of the program, most schools award a certificate of proficiency, or a comparable type of diploma, which provides evidence of having completed the requirements of the individual school of occupational therapy. The certificate of proficiency

which is awarded to the college graduate group appears to be an archaic holdover from the era when all occupational therapy schools were independent, technical schools and were unable to grant a bachelor's degree. It is definitely not in accord with the educational preparation demanded for admission to the curriculum, nor is it commensurate with the calibre of performance which the student must demonstrate.

Some of the schools currently award a second bachelor's degree to the student who successfully completes the certificate program. This practice seems to be rather pointless and of questionable value both to the student and to the profession. Other schools grant up to ten hours of graduate credit toward a master's degree in another discipline, usually education. This procedure likewise does not appear to be the appropriate one to advocate, either for occupational therapy or for the other field in which the degree is eventually granted, and the practice has received little acceptance throughout the country.

Since the present-day certificate student, who is already a college graduate, receives an intensive eighteen-months period of educational experience at the post-college level, it seems just and appropriate that these students should receive a graduate degree which indicates the university's, as well as the profession's, acceptance of the quality of this professional preparation. It would appear that a professional master's degree is perhaps the most feasible for most institutions, but it may be possible that successful completion of the program could warrant an academic master's degree whichever is considered by the individual institution to be in keeping with its present policies concerning graduate degrees.

It is argued by some that the certificate program, since it provides the basic preparation for the occupational therapist, does not warrant the awarding of a master's degree. Actual professional specialization, the basic programs, for many professional fields is given at the graduate level of college education. All these programs, be they medicine, law, clinical psychology, social work, rehabilitation counseling, or numerous others, give some form of degree which is widely recognized as evidence of education at a post-collegiate level. The degrees in law and some in medicine may be called a bachelor's degree, but it is ridiculous to consider that terminology thus equates these degrees with the bachelor's degree awarded upon completion of the usual undergraduate program. In the other fields, basic professional specialization is recognized by granting either an academic or a professional master's degree. Admission to these programs is dependent upon completion of certain academic requirements during the student's undergraduate education, and this holds equally true for occupational therapy. Consequently it does not seem inappropriate that the basic, specialized preparation for occupational therapists should similarly be at the graduate level.

Certain professions whose major area of work is in some aspect of medicine, notably social work, clinical psychology and rehabilitation counseling, occupy positions of responsibility which are comparable to that of the occupational therapist. It is notable that all of these fields have markedly similar basic professional educational programs and all grant a master's degree upon successful completion of the prescribed program with the exception of occupational therapy. The responsibility upon the therapist for a patient's welfare is at least as great as is that of these other paramedical personnel, but because of the inequity in degrees the therapist is at times relegated to a subordinate status by the other professional and lay persons with whom he works. Furthermore, the occupational therapist is generally penalized financially, although his contribution to the patient's rehabilitation is of equal importance, and his educational preparation has been as extensive as these other groups.[9]

There are additional aspects of the present curriculum in occupational therapy which are presently working to the detriment of the profession as a whole. In the first place, all of the many health professions are in some measure competing for the same people as potential students, because all of them have as their primary emphasis that of service to humanity. In view of the shortage of personnel in all the allied medical fields, this competition is inevitable. It is only logical for persons to choose those fields which not only satisfy that desire for service, but which also give them a status in which their ability to help is recognized and utilized to its fullest extent.

Occupational therapy must convince the person who is desirous of entering a health profession that the particular field is the one best suited to his talents and interests. However the undergraduate program, as presently established, requires four and a half to five years of preparation in contrast to the four years required in nearly all other baccalaureate programs, and the profession is particularly and unduly penalized in its ability to attract college graduates because it is the only one having the requirement of two years of post-graduate training which does not grant a master's degree for this work.

The current certificate programs are all conducted at universities having an undergraduate program as well. The certificate student takes many of his courses of specialization with the

undergraduate students, a procedure dictated by factors of economy, time and the availability of faculty. Although the information presented is basic to both groups, it is apparent that this is an inefficient method of education, for the two groups are not at the same level of learning. Classes composed entirely of graduate students could be conducted on a different basis than is presently possible in the mixed classes. These classes could conceivably cover a similar amount of material in a shorter space of time than is presently feasible for the undergraduates who are still in their maturing years, and who are also absorbed in many other aspects of college life.

GRADUATE CREDIT FOR TECHNICAL COURSES AND FOR CLINICAL PRACTICE

The rapid strides in medical knowledge have necessitated the addition of ever-increasing amounts of preparation to the already overloaded curriculum. Since it is impossible to expand the program further in this manner, it seems apparent that it would prove to be a more effective one if it were confined entirely to the graduate level. This would mean that college graduates, having the appropriate prerequisite courses in undergraduate programs, would be able to pursue a course of study which can be geared entirely for their level of educational attainment. Occupational therapy is finally coming of age as a profession, and it can no longer be viewed either as a specalized undergraduate program or as a technical school education. It is felt that the program should be placed on a graduate level as it deserves, and as it is in actuality in the certificate programs, and that appropriate recognition should be given for successful completion of the eighteen months program by granting a professional or an academic master's degree.

The occupational therapist uses as his therapeutic media a wide variety of activities and occupational skills. Included in these are shop techniques, various textile skills, homemaking skills, recreational activities and occupational arts and crafts of various types. Since these activities form the basic treatment techniques in occupational therapy, it is essential that each therapist have sufficient training in each of these skills so that he is able to relate them to the patient as an individual and to his particular medical problems and, through the medium of these activities, help the patient to return to health. Occupational therapy exists as a specialized medical profession only because of these specialized "tools" of treatment, and without them the profession's reason for being ceases to exist.

No one of the courses, if given properly, attempts to make of the student a cabinetmaker, a master silversmith or a master weaver. Rather, each course seeks to provide a knowledge and understanding of the basic processes involved and of the tools, materials and equipment utilized in each activity. Throughout it all, the primary emphasis is to have the student observe, evaluate, judge, and criticize the basic processes and then relate them to the gamut of medical syndromes which are being covered concurrently in the medical subjects. Many persons, be they physicians, teachers, counselors, social workers, scientists or engineers, have comparable courses in technical skills as a part of specialization in the basic preparation for the profession. It thus seems only appropriate that the occupational therapist receive comparable credit in the basic curriculum for the courses which provide competency in the technical skills employed by the profession.

It is common practice in many universities throughout the United States, including those most highly regarded, for graduate students in anthropology, archaeology, botany, psychology and other departments to receive graduate credit for field work. In these programs, moreover, field experience is generally considered an essential requirement for the programs at both the master's and doctoral levels. Students of social work in recognized state and private universities and colleges receive graduate credit for the field work which is an integral part of professional training. It therefore seems entirely justifiable in the field of occupational therapy that clinical affiliation should similarly receive graduate credit toward an advanced degree.

RECOMMENDATIONS FOR THE CERTIFICATE PROGRAM

1. It is recommended that the present certificate course be designated as the basic curriculum for professional specialization in occupational therapy.

2. It is recommended that specialization in occupational therapy be restricted to the graduate level of education. Preferably, the program should be offered by those institutions of higher education which have already in existence a graduate school or schools as part of the institution. Such institutions should have a medical school as a part of the institution, and a close affiliation with this program is strongly advised.

3. It is recommended that immediate consideration be given toward modifying the total curriculum so that didactic preparation and clinical experience are concurrent experiences for the student. The present schedule of one year of academic work followed by actual experience in working with patients and in applying occupational therapy theory is not the most effective nor appropriate method of education for the profession.

4. It is recommended as a requirement of the program that each student prepare a thesis in the field of specialization. This should be a substantial scholarly or scientific paper on a professional problem arising during the course of clinical practice.

5. Finally, it is recommended that the student be awarded a master's degree upon the successful completion of the academic, clinical and thesis requirements. The degree, depending upon the wishes of the particular institution, can be set up as a Master of Arts or of Science in Occupational Therapy, or as a professional Master of Occupational Therapy.

ADVANCED CURRICULUM IN OCCUPATIONAL THERAPY

The establishment of the educational program in occupational therapy as a specialized, professional program given in its entirety at the graduate level and grounded in a liberal arts undergraduate program would do much to improve the services of this medical specialty not only to the individual patient but to the community and to the nation as well. It is not enough, however, that the educational program be revised with consideration given only to the basic curricular preparation for the profession. Serious thought must also be concentrated on the provision of the additional programs which are necessary in order to ensure an adequate and qualified supply of faculty for the schools of occupational therapy. Secondly, there should be advanced educational opportunities which will enable the current and future supply of therapists to work with greater effectiveness with specific disabilities. Finally, there should be available curricular offerings which will improve the utilization of these professional personnel. In short, there is need for advanced graduate work which will prepare therapists to teach, to do research, or to assume administrative and supervisory positions.

TEACHERS OF OCCUPATIONAL THERAPY

An advanced graduate program will serve as the best means of preparing persons who are to teach students of occupational therapy in the thirty institutions of higher education which currently sponsor such programs. While it is indispensable for such teachers to have clinical experience in the profession, it seems obvious that an effective teacher requires additional preparation in order to become competent in the educational phase of occupational therapy. These persons must not only acquire competency in teaching, but they must have the opportunity to further their knowledge of the field, and must be thoroughly acquainted with the organization and administration of institutions of higher education so that the curriculum may best serve the needs of the students and of the profession. There is an interest in the establishment of new programs in a number of universities in various parts of the United States, and the demand for competent teachers and for qualified directors of schools will thus continue to increase.

RESEARCH IN OCCUPATIONAL THERAPY

In line with good principles of education, a well-balanced, basic training in all of the medical areas in which occupational therapy has proven of value is considered essential to the development of an effective specialist. This philosophy is in concert with the educational practices employed in the training of other medical personnel. It would be highly detrimental to the individual therapist, to the profession, and ultimately to the patient to permit narrow specialization in the basic curriculum. Further, it has been borne out by the experiences of many therapists that their initial impression during the academic phase of education, as to the area for which they consider themselves best suited, may not in actuality be the one in which they find themselves most effective.

The student, during the period of theoretical, technical and clinical training, acquires a broad knowledge and understanding of occupational therapy as applicable to five major medical fields: psychiatry, general medicine and surgery, physical disabilities, pediatrics and tuberculosis. The therapist's educational preparation, then, is such that he is qualified to work with any of these medical conditions. Continuation of this type of preparation is strongly advocated. In actual practice each therapist commonly confines himself to the treatment of but one of the above classifications, although it is apparent that there is some overlapping among the medical areas. This specialization is due in large measure to the fact that patients with varying diagnoses are separated into hospitals and clinics specifically designed to treat a particular disability or group of disabilities. It is also true, however, that methods of treatment for the different disease entities may vary markedly, although there are certain underlying principles of treatment which are common to all areas. It is not possible, obviously, for a single person to be fully competent to work with all types of disabilities at the same time, because of the necessary variations in treatment emphasis.

As each therapist specializes, it is inevitable that there will be gaps in knowledge, since the broadly conceived, basic curriculum cannot possibly include all the requisite information for each type of disability. Although it is possible to learn much of the needed information while on the job, this is admittedly an inefficient meth-

od of gaining all the necessary knowledge. An advanced program beyond the master's level, allowing for specialization within certain areas, would prove invaluable in increasing the professional competence of therapists.

A further, vital consideration is the great need that exists for therapists who are qualified to do research, in order to discover the effective therapeutic measures for the many kinds of physical and mental diseases. The present program allows little if any time to become conversant with the techniques of the scientific method. Occupational therapy is a very young profession and many questions concerning treatment still are not adequately answered. All too frequently answers are arrived at through the use of empirical methods only. Such questions can be satisfactorily answered only if the profession itself develops persons who are competent to do research. In this manner, treatment procedures will be improved and there will be provided objective means of evaluating and defining the entire scope of occupational therapy.

ADMINISTRATION AND SUPERVISION IN OCCUPATIONAL THERAPY

Increasing numbers of therapists are today assuming positions of leadership as supervisors and administrators of departments. In addition, some are currently occupying positions as executive directors of rehabilitation centers and of various other types of community service agencies. While it is generally recognized that persons in such positions should have a professional background in a particular medical discipline, there has been a minimal amount of provision made to prepare them to be competent administrators. In view of the tremendous shortage of qualified personnel, and the ever-growing demands for such services, it becomes increasingly vital that the best use be made of all available therapists. Therapists who occupy positions of executive responsibility should acquire the business and managerial skills which will make them capable of utilizing the abilities of the persons under their supervision to the fullest possible extent. A graduate program would provide these persons with the training they require in order to perform their administrative duties most effectively, and in order that the present utilization of professional staff personnel may be enhanced.

PROFESSIONAL INTEREST IN POSTGRADUATE PROGRAMS

In an age of specialization, increased medical and scientific knowledge of specific disorders has resulted in the need for concentration on training in a given medical field. Specialized training in a variety of therapeutic activities, such as art, crafts, education or recreation "is less important in the adequate practice of occupational therapy today than is specialized training in the technical and clinical aspects of the medical specialty in which these modalities are to be applied."[10]

Numerous postgraduate courses for working therapists, ranging in length from one week to six months, are being offered by various schools, by hospitals, and by national health organizations. Institutes and refresher courses are also being offered, and the number of such programs has increased markedly within the last few years. Of more importance than the sheer numbers of such offerings is the fact that each of these postgraduate programs is eagerly received and well attended by practicing therapists whose desire is to increase their ability to help patients. The response to such programs throughout the United States indicates a sincere desire on the part of therapists to broaden their knowledge and increase their professional competence in their own particular field.

While these programs are effective and meet a definite need, it is evident that a formal, advanced level, graduate program would provide therapists with a far more complete and thorough training which would increase their effectiveness in dealing with the manifold problems encountered on the job. Consequently it seems evident that both the professional need and the professional desire exist for a graduate program leading to a doctor's degree in occupational therapy.

CURRENT GRADUATE PROGRAMS

At the present time, three institutions of higher education offer the advanced curriculum in occupational therapy leading to a master's degree, with a major in occupational therapy. These programs draw quite extensively upon the other departments within the universities. The suggested courses in other departments are primarily in education, physical therapy, psychology, social work, sociology and business administration.

The American Occupational Therapy Association has available in mimeographed form a set of recommendations which are proposed as the essentials for an advanced curriculum in occupational therapy. A careful examination of these proposed essentials reveals that there is much merit in them. However, as will be discussed in the next section, it is believed that the level of graduate education as suggested in these recommendations is an inappropriate one.

As was indicated in the earlier discussion of the basic curriculum in occupational therapy, the appropriate level for this specialized education is considered to be that of the graduate level, as is presently true in many other comparable professional groups. Consequently, of necessity,

an advanced curriculum would then be appropriately placed at the doctoral level. More important, however, is the fact that recommendations of the national organization, while meritorious in their concept, are quite unrealistic in the requirements they advocate for the advanced curriculum. Not only do they suggest as prerequisites that the student be a registered occupational therapist, which for the certificate student means the completion of six years of higher education, but in addition they suggest a requirement of a minimum of two years of clinical experience. This means that a person who elects the certificate program in occupational therapy is not eligible even to begin work toward a master's degree until at least four years have elapsed from the time he received his baccalaureate degree. Likewise, even the student who has taken occupational therapy as an undergraduate and has completed the program within the minimum time requirement of four and a half years, is not eligible to do work at the master's level until at least two and a half years later than his college classmates. Such standards, however laudable, seem totally unrealistic in relation to other master's level programs. It is far more logical and justifiable that such requirements be established for an advanced program leading to a doctor's degree in occupational therapy.

Thoughtful consideration indicates that all of the patients with whom the occupational therapist works may, regardless of diagnostic definition, be classified under the two broad headings of physical or mental illness. To break these two classifications into small, highly specialized groupings seems but an unnecessary splintering of the two comprehensive designations, a practice which if promulgated will but lead to the development of narrow specialists who not only will be at a loss outside the particular specialty, but also will be less effective within it because of the narrowness of their vision. Furthermore, the concept of graduate education for occupational therapists should be broadened in yet another manner, in line with established graduate programs in other fields of knowledge. Persons in advanced graduate programs ultimately will utilize the knowledge attained in one of three major roles: as a teacher, as a research worker, or in an executive role. An advance curriculum in occupational therapy should be similarly oriented along these broad lines in order to be truly effective. The primary emphasis in graduate education should be upon the eventual area of application of the knowledge gained, whether it be in teaching, in research or in administration, and the area of medical specialization should be considered as encompassed within the two broad areas of physical disabilities or mental illnesses. Regardless of the area of primary medical interest, each program must vary according to the eventual role the student intends to assume, and the approach to the medical subjects will therefore vary accordingly. Conversely, by allowing but two broad medical classifications, the student will still be able to select his area of major interest, but will not limit himself so narrowly that he will omit pertinent realms of knowledge.

A final criticism of the present concepts of graduate programs is that such a curriculum establishes what is essentially a "dead end" degree. If advanced work in the field is considered to be at the master's level, this in effect cuts off any further possibility of educational advancement in the specialty. Such a position is definitely not desirable, both from the point of view of the profession and from that of the therapist who is a member of a university faculty. Indeed, such a position is not advocated by the graduate schools of universities. The potential of the profession warrants education at both the master's and the doctor's levels, and it is therefore only appropriate that it be so established.

SUMMARY

In summary, there is at the present time a definite and clear-cut need for graduate programs which will give occupational therapists the opportunity for academic work beyond the level of the basic curriculum. Such programs are advocated as the most effective method of improving the services of the particular profession to the mentally and physically disabled members of the community. Such programs would further ensure an adequate supply of fully qualified faculty to staff the schools of occupational therapy. They would also improve the effectiveness of the current supply of therapists working in specific disability areas by giving them the opportunity to expand their knowledge of the particular disease entities, and by furnishing them with the skills needed to provide more effective treatment and to carry on worthwhile research programs. Finally such programs would provide an additional corps of therapists with the supervisory and administrative skills needed to assume positions of leadership in the clinical situations.

It is recommended that an advanced curriculum in occupational therapy be established.

It is recommended that the curriculum provide for specialization within the two broad medical areas of physical disability and mental illness. It is further recommended that provision

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IMPROVING INSTRUCTION IN OCCUPATIONAL THERAPY

CAROLINE GOSS THOMPSON, M.A., O.T.R.*

THE EDUCATIONAL ENTERPRISE

Dean Cottrell of the college of education, Ohio State University, in discussing the rather profound question "How much conformity must we have in order to safeguard a democratic community?" has made some observations about those characteristics which differentiate the democratic from other forms of social organization: for instance, every person counts, and his contribution is to be received and used on the basis of its merit; secondly, the highest possible level of welfare for all is a common and not a delegated responsibility. Maintaining conditions favorable to these values is, he feels, the first task of the democratic community. This common welfare has no meaning except in terms of the welfare of the individuals who make up the community, and these individuals differ profoundly; he also feels that the common life will rise no higher in worth or wisdom than society's best individuals do. Since it is possible for the group to tyrannize over the individual, it is important to protect the right of dissent and keep as wide a margin as possible "for individual freedom of action and belief."[1]

Dean Cottrell feels there are only two choices open regarding the big complex organizations which seem to have taken over in the realm of personal values: to reject them on the basis that they are inherently bad, or to assume they are "actually and potentially good, and are susceptible of control, change and even replacement, in some instances, by men in the interest of their personal and social welfare."[1] The first assumption means somehow turning the clock back as Ghandi did. If we take the second, and assume that our super-organized community can be controlled so as to give opportunity and even advantage for greater individual achievement and personal freedom, how would the teacher define his task? It has two parts: to prepare people to adapt to the operations of existing institutions, and to prepare them to stand off at a good distance for perspective, evaluate the form their lives are taking, and exert themselves individually and collectively to realize the conditions necessary for their own good life. "The task of citizenship is of just such proportions."[1] Whether people can control their own destiny is the main question of the day.

One of the main methods adopted by people today to control their direction and their destinies seems to lie in some refinement of the group process. This is the method adopted and in current use by the profession of occupational therapy to keep its balance and enable it to absorb and use the new developments in medical practice in 1958.

Why is this use of group or cooperative problem-solving important as a means of improving instruction in occupational therapy? At the present time professional preparation for teachers for the occupational therapy courses in colleges and universities is almost non-existent. There are only four colleges offering master's degree programs in occupational therapy in the country, one in the east, one midwest and two on the west coast. The faculty to staff the current programs of undergraduate education are coming from hospitals and their professional education, as well as their experience, has been focused primarily on treatment of patients. There are thirty undergraduate programs today in colleges and universities, and fifteen more colleges are interested in starting their own when staff become available. Meantime an acute shortage of therapists in hospital programs makes those employed there who would like to become teachers hesitate to take time from their work in order to take training. Employed on a twelve month basis, like all hospital workers, they have no summers free in which this could be accomplished. Learning new things, then, is currently most practical by means of institutes and workshops sponsored by the state and national professional associations.

PRESENT DAY TRENDS

Many changes have recently taken place in medicine which affect occupational therapy. With the rapid wiping out of infectious diseases during the past twenty years, medicine has become increasingly concerned with a different set of problems. The rehabilitation of patients with chronic diseases is one of these, another is the developmental problems of childhood, a third the emotional upsets which are still distressingly current to the point of pathology. In some of these areas the federal government, recognizing the size of the task, has, under President Eisenhower's leadership, undertaken to give financial assistance both in the treatment programs and in the preparation of professionally trained personnel to assist the doctor.

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Among the medical associate professions in which many more qualified people are needed is occupational therapy. Currently the two main fields in which occupational therapy has contributed, psychiatry and physical restoration, have been making rapid strides, both in change of concept and in developing new ways to proceed in treatment. With these changes, new roles emerge for all the disciplines working intensively in these areas.

As a direct result of the changes in medicine and in the role of the occupational therapist, representatives of the American Occupational Therapy Association have taken part increasingly in joint meetings with other professional people—fifty during the past year. There has been a continuous modification of professional thinking and attitudes resulting from this. The trend towards institute and workshop meetings has been marked.

The focus of the "interdisciplinary" meetings has been on methods of preventing what is dreaded by any professional group in a time of personnel shortages with ever-increasing numbers of patients, and that is duplication of effort and projects at cross-purposes, with a waste of both time and effort resulting from poor planning. There is so much to be thought out, evaluated and put into action in times like these that no health group can afford to plan without extra-organization orientation and coordination, as Colonel Robinson points out:

> The organization, like the individual, does not operate effectively or progress easily in a communication vacuum. No group is more aware of this than ours. To me the basis of our philosophy of communication is that to share ideas is to be both a student and a teacher; to discuss problems is one of the surer paths to valid solutions; to try to listen or speak with intellectual awareness, rather than emotional prejudice, is the door to the understanding and appreciation of the role, point of view and aim of others.[2]

Colonel Robinson goes on to say that mutual awareness will bring each group to a clearer appreciation of its own responsibility and a better understanding of its own potential. Results confirming the validity of this philosophy are very evident. Many of the recent accomplishments of the occupational therapy profession in concept modification and in plans for future action were sparked by the exchange of ideas at such meetings of "interest-allied" groups. Participation has not been one-sided, as we have in turn invited representatives of other professions to meet with us to study and discuss particular aspects of our work, and both methods have been fruitful. The process of keeping open channels of communication will continue to be important if we are to keep abreast of the rapidly developing concepts and techniques in the field of "total patient care."[2]

MEETING THE NEED

Like our American society as a whole, the profession of occupational therapy is now in a stage where it must concentrate on improving its organizational processes, not to the exclusion of attending to its product but as a means to make that production solid and sound. The 1957 institute was the result of a series of efforts to improve the occupational therapist's preparation to fulfill his role, and dates back to 1954 when an institute was held at a national conference in Washington, D. C., using small group discussions almost exclusively and based on professional help of a high calibre. The topic was "Interpersonal Relationships." No subject could be more germane to the work of the occupational therapist, and the method used was electrifying in its effectiveness.

Following this meeting, federal funds were sought (from the Office of Vocational Rehabilitation, Department of Health, Education and Welfare) and in June, 1955, a week-long institute or workshop conference was held at the College of Physicians and Surgeons, Columbia University, New York. The topic this time was "A Reassessment of Professional Education and Practice"; those attending were one representative from each of the thirty colleges and universities giving a course of professional education in occupational therapy and an equal number of selected occupational therapists who were directors of hospital departments of occupational therapy in which students are assigned for their supervised practice in treating patients (similar to student teaching). Out of this experience came a number of ideas which are still alive and growing today:

1. All who took part still feel committed to do what they can to make the student's preparation in both university and hospital more pertinent to the demands of present day treatment.

2. A greater integration came about between therapists in different phases of work. While for years the pediatric occupational therapist, the psychiatric occupational therapist and the specialist in physical disabilities, for example, had looked at each other across a yawning gulf, suddenly all discovered they had much more in common than they had thought and their problems were in the main identical. There was a dissolution of barriers in a common enterprise and, although the discussions were purposely held in homogeneous groups to give confidence and a common background, the recommendations from all of these overlapped astoundingly.

3. It was concluded it would be desirable and useful to make a similar experience available to as many other occupational therapists as possible, even to the extent of putting on similar programs on a regional basis for wider participation.

4. The conclusion was reached that our divisions are somewhat artificial, and that we should develop a student experience in "general" (now called "basic") occupational therapy.

All of these concepts are still active today through individual members of this conference in many areas of the country, and some have assumed great momentum in the direction of association events, committee work and policy. Like measles, they seem to crop out all over.

The following summer (1956) those who had taken part in the New York institute put on regional institutes in four locations planned for accessibility to the greatest number and similarly financed and sponsored. Topics were as follows: Group Dynamics in the Team Approach to Rehabilitation, Prevocational Techniques and Media, Techniques of Instruction and Administration, and General Approach in Occupational Therapy. Two hundred occupational therapists connected with professional education were able to take part. As the schools or courses had all benefited before, this time a proportionately larger number of hospital affiliation directors were able to participate. At these meetings applications were accepted from any hospital department responsible for the training of students.

The bulk of the meetings took the form of small groups of ten or twelve discussing their own problems. The manual of proceedings from the 1955 meeting in New York and the suggestions emanating from it furnished both preparation for participants and topics for these institutes. Some effort was made to "commit to action" before the group separated, and once more all dispersed full of enthusiasm and new ideas (their own) as well as the impetus to apply them in the local situation.

From the report of the coordinator, "one of the intangibles resulting from these regional institutes was the stimulation to broader and more independent thinking."[3] The major effect was the furnishing of impetus, and which of the group's recommendations an individual selected to work on has turned out to be a highly individual matter.

While the four institute topics listed above emphasize various aspects of occupational therapy, considerable overlap was expected, and this was evident in the similarity of the recommendations from different institutes, as from different subgroups at the first meeting. This indicates a tapping of the actual problems of most concern to occupational therapists engaged in education across the country, whether in colleges and universities or in the hospital setting. Below are some samples of the recommendations that came out:

1. Closer working relations must be developed between schools and clinical centers.

2. The subject of group dynamics must be included in occupational therapy programs, academic and clinical.

3. The screening of students should be improved.

4. Experience in administrative processes should be made available to students in their hospital affiliations.

5. More institutes, seminars and workshops should be made available.

The idea of general or basic occupational therapy theory, to which a meeting was devoted, assumed great vitality and the following proposals have since been activated by the council on education at two meetings in 1957.

1. It was agreed that the general approach in occupational therapy is a sound philosophy and should be implemented on all levels of education and practice. (This was subsequently endorsed by the Board of Management of the American Occupational Therapy Association.)

2. A national committee should be appointed to develop the above recommendation.

The implications of basic occupational therapy are: (1) that we should determine the elements of occupational therapy that are common to and must be known by all occupational therapists, (2) a patient should be treated on the basis of his needs and not his diagnostic classification (a cardiac and tuberculous patient, for instance, have many job problems in common, some of which they share with other physically handicapped) and (3) we are troubled in many of our mechanics by the classification at cross-purposes to this on which hospitals are set up—that of segregating patients according to their clinical diagnosis, so that there will be one hospital entirely for arthritics, another for psychiatric patients, etc.

It was felt by some council members that the change would be largely a matter of teaching emphasis, attitudes and the assigning of students to practical experience using a new classification. It was also felt that careful interpretation to the membership would be needed in order to avoid resistance by those needlessly fearing the loss of their student program if they failed to classify within some new unknown grouping. This sort of obstruction to exploring the idea has developed as anticipated, and is due to uncertainty and the anxiety that comes with any prospect of change whose course cannot be completely visualized. At the same time, this idea has so much worth and interest for the profession that at the 1957 fall meetings of the education committees of AOTA in Cleveland, two more regional committees were added to the original one activated last April in California, where a nucleus of the people who worked on the idea at their 1956 institute were unable to let the idea drop.

Following the success of the 1956 regional institutes, which concentrated on the rehabilitation of the physically handicapped, in November of that year a week-long workshop was held in psychiatry, preceded by a year of preparation

by regional "commissions." Participants here were psychiatrists, occupational therapists, social workers, psychologists, music therapists, recreation therapists, etc. One outcome was the request that occupational therapy continue leadership in this effort to know the other disciplines operating in the treatment of the mental patient; several interdisciplinary meetings have since been held with the object of common understanding and concerted effort for the patient to avoid the duplication mentioned earlier in Colonel Robinson's report. Again mutual goals have emerged to the benefit of all participants, reinforced by mutual understanding.

Following the success of all these institutes, the identification of elements common to the profession that evidently wanted exploring, and the continuing demand of the membership for more such meetings, the Board planned the 1957 annual conference as an institute for 600-700 people (instead of 60 or 200). Prominent among the needs identified had been more institutes, more skills in communication and further study of interpersonal relationships, both in participation in groups of professional people and the "therapeutic use of self" in treatment of the patient. These were made both theme and method of the 1957 institute, which was open to all the membership. It is estimated approximately one-fourth of the active members of the association took part. A few persons became mildly disturbed about their personal problems, but as an effort had been made deliberately to keep to objectivity in planning and not engage in any soul-searching or group therapy, the reactions were not undue.

SUMMARY

The process studied and illustrated here is essentially the means to effect a change for the better—the effort of man to control and shape the events in which he is involved. I have heard two criticisms of this particular method. The first is the expressed fear that it will cancel out individuality. I do not believe this is so. It is a tool for group attack on problems, serving the need to grow. It is a tool to think with and to keep balance with in a situation, so as to change and grow with the field.

There are other means of improving instruction. The student is "That live . . . imperfect, capable, maturing being."[5] Graduate study is another, for certain purposes. Sociological research is beginning in medicine. The guest instructor, an expert on communication, may address the class. But the outgrowth of democratic processes described above is a method to encourage active contribution by those most concerned. It helps make people self-propelling. Miss Mildred Wells, in "A Philosophy of Teacher Education," says:

> Individuality emerges out of group relationships and matures as a person grows in his effectiveness to operate in groups.[4]

He can choose groups where conformity is not achieved at a price, those in which he can operate with integrity, sharing the formulation of group purposes, transforming purpose to action and evaluating results. As a teacher of occupational therapy students experiences growth in group participation, he or she becomes more able to help the students gain like satisfaction, and this will be ballast and rudder for the years to come. They will learn through these democratic processes to define their role in action, and to rotate leadership according to the competencies needed from time to time by the group.

The second criticism I have heard expressed, though not widely, is a concern over lack of matter for the groups to discuss. Having gone through the expenditure of time and effort to become productive, where is the product? "We should tackle association business and get out a manual or something." Granted that change is no more than knowledge an end in itself, the group process does offer a means through which any segment of society can capitalize on the best thought and knowledge that it has. We in occupational therapy are very near to the practical details of daily operation. We need to stand back and evaluate the end result, and the wise generalizations of an older profession have the impact of sudden flashes of insight, so nearly do they fit our observed truths.

Miss Wells says that in any school where students are encouraged to base their actions on knowledge and thought, the teacher must have a perspective for evaluating change. Otherwise he will be at the mercy of the last book he read, and will attempt to teach values instead of participating with the students in arriving at them. But if he examines proposals in the light of the question. "Does this extend the freedom to learn and the ability to participate, and does this square with our constellation of democratic values?[4] he can cull out what is trivial and act on what has worth.

"To work towards an all-inclusive circle and to capitalize on the individuality which membership within it gives to all and which it needs from all—this is the task of the second century of teacher education and of the teachers who emerge from it."[4]

I believe that the value and effectiveness of this method of improving instruction in occupational therapy lies not in a product or published

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Eleanor Clark Slagle Lecture

EVERY ONE COUNTS

MARGARET S. ROOD, M.A., O.T.R., R.P.T.

INTRODUCTION

As the activation of every reflex is necessary in the proper sequence toward coordinated effortless muscular control, so the activation and learned control of basic reflexes in developmental order are necessary for the highest level of emotional maturity. Intellectual maturity, independent thinking, can never be achieved by stuffing the mind with rote learning or facts without progressing onward to individual comprehension and application to original contributions based on the work of others.

If emotional and intellectual maturity are developing dynamically, then professional maturity can be attached happily and wisely for the warmest interaction of all, to secure the best treatment for the patient. And if we are truly maturing then the needs of others will be our guide in the considerate give and take of professional life.

And as we come to the full realization of the need for stress for growth so we must realize that the attitude toward stress will make it a challenge toward increased development or a block to our progress. Unlike the school situation where a grade remains static on the record, in living one has a chance to try again. Having achieved, that record counts as does the strength gained from trying.

The course was charted for us a long time ago. Each individual is a product of his heritage, his experiences. We benefit by the drive and vision of those who have gone before and we in turn have a responsibility to add our particular share whatever it may be. And as Eleanor Clarke Slagle had the vision and selfless devotion in the initiation and development of our professional organization, we must build on that foundation to pass on an improved heritage to those to come.

In turn may I discuss briefly the physical, emotional, intellectual and professional aspects in relation to selected principles of muscle reaction.

PHYSICAL DEVELOPMENT

Activation of muscles proceeds from reflex or involuntary stimulation to voluntary control. In the loss of voluntary control of muscles from many causes it may be possible to reactivate muscles if the cause is physiological discontinuity and not anatomical destruction. But it is necessary to stimulate the first reflex pattern. Therefore, the sequence is important and the total pattern within the sequence. If balanced development does not occur early the problem of treatment will always be more difficult because there will be parts of many reflexes acting in an imbalanced pattern.

For efficiency of a part, interaction with an antagonist is necessary for (primary) shortening and (secondary) lengthening before cocontraction of both at the same time is possible. If one of a pair of muscles does not function in reciprocal innervation, eventually the normal one will be seriously affected. Gravity or stress is essential for the stimulation of the heavier work muscles and for bone growth. Cocontraction or static support positions are essential before heavy work movement is effective. As in cocontraction for support—whether on elbows, all fours or standing—the distal segment is stable, so too the heaviest work a muscle does in movement in its biological purpose is with the distal segment stable. One of the most difficult muscle problems is the lengthening reaction of heavy work one-joint muscles such as the soleus, vasti and anconeus. Slow knee bends with heels flat will get both lengthening and shortening reaction of the vasti and soleus. This is different work from the lighter guiding (lengthening) reaction of the longer muscle passing more joints. Lengthening reactions are important to flexibility as well.

As an example of this approach to muscle action, we might contrast the Delorme heavy resistance at ankle for knee extension versus squatting, which is the normal functional use of the muscle.

The quadriceps loom or kick wheel which embodies this same principle is excellent for the rectus femoris but not for the vasti which is our major problem usually.

In squatting the feet are on the floor or, in other words, the distal segment is stable and the muscles must pull the rest of the body into alignment, a heavier job than just moving the distal end of the extremity.

In life, the rectus femoris comes into play in walking which is a lighter work demand. Therefore in actuality, occupational therapy procedure involving squatting is more effective than kicking if it is the vasti which needs strengthening.

In learning patterns or movement to reproduce at will, the individual must do his own learning.

As therapists we must give sufficient stimulus but prevent ourselves from helping too much. Passive action is not the answer. Light work patterns of skill require cortical or voluntary attention. The shoulder rotator cuff muscles of a patient with subluxation of the humerus may be activated by heavy work grip of the hand but not by light work.

Postural cocontraction for erect position can be gained by dental dam rubber resistance to top of head or over each shoulder following appropriate stimulation. Therefore, rather than asking for voluntary correction of posture or traction, resistance is used to cause postural cocontraction without conscious thought. During passive activity such as TV viewing, no attention need be paid because there are more reflex feedbacks below the level of consciousness for heavy work. Stimulus from the muscle spindles found in heavy work muscles pass only as high as the cerebellum for integration. Also repetitive, rhythmical patterns will release top level control after patterns have once been learned. Therefore rhythmical music is the most effective tool; not the metronome with its interrupted tone which requires a more cortical response.

The last two examples would give some indication that fatigue is involved not in the muscle but the cortical control of the pattern. These same points might well serve to illustrate developmental reactions in emotional, intellectual and professional growth.

EMOTIONAL DEVELOPMENT

As the give and take of shortening and lengthening reactions of muscles is necessary for the health of both, so the giving and receiving of love and of stress is necessary for healthy emotional reactions, and these must be in the sequence of normal development. The baby receives care, love and protection. From this early selfish taking he should progress to wise receiving and giving. That which an individual desires and that which is most ego satisfying to the giver may create or prolong dependence. There will be many, many steps in human relations with definite sequences and experiences necessary for full maturity. Accepting one's parents as interesting individuals on their own merit is one of the higher steps.

The facing of stress is essential to full emotional maturity. Sympathetic nervous system arousal needs repetition so that it can be assessed as non-critical, and therefore may result in a controlled learning experience rather than an uncontrolled emotional reaction. Some withdraw from hurt, others become aggressive. The former is more serious since the damage is to self while the exterior signs do not bring forth the social disapproval attendant to aggression. Aggression, or any pressure of ideas, begets resistance, so care should be used in pushing ideas. Attitude on the part of the recipient toward stress will determine whether it be a healthy challenge to growth or a stimulus for withdrawal in an unhealthy pattern. Comprehension of the fact that insecurity breeds resistance will allow for more intelligent handling of such problems. Holding firm under stress is important also for the individual to learn.

Muscles need light and heavy work patterns in movement and holding to keep in the best equilibrium. Making a point of having friends of all ages is one of the surest ways to prevent atrophy or contractures of the spirit.

Careful selection of most important things will prevent the hyperkinesia of too great superficial stimulation. Heavy work stimuli lead to relaxation and renewal of the body. The physical and emotional are interdependent. It is important that there be a balance of gross physical activity when the mind creates tensions. Likewise the joys of simple as well as the more complex, pleasures should be kept and fostered.

Dependence on outward approval may be too strong. There is a need for developing one's own goals and these may be higher than those set by others. Insecurity requires constant repetition of approval. A secure person realizes that if a decision is thoughtful and right insofar as one knows, one must try to face without bitterness the criticisms which will inevitably come. There is adaptation of the sensory receptors only if the situation is too static or reptitive, however there is some slight adaptation of the sensory receptors to the criticisim; nevertheless the criticism should be listened to carefully and the soundness of it judged in the light of what one knows. The interference of emotional reflex reaction will not allow sound judgment, as reflex emotion and intellect are at variance.

INTELLECTUAL OR EDUCATIONAL

Thinking too must have the reciprocal innervation of give and take to be of the greatest value. Light and heavy work will give an appropriate balance.

Rote learning or easy receiving is supposed to be at its peak up to fourteen years of age. Are we continuing it beyond this age unnecessarily? One knows how hard it is to set students free to think. It is easier in the beginning of professional life, but if set patterns have been established, insecurity and emotional reactions will delay the establishment of new habit patterns. The new student can more easily relate principles to the basic sciences since he does not have old techniques to uproot.

In professional life, are we properly stimulating our therapists in give and take at small unit meetings as part of our association activities? Individual study assignments to key free-for-all discussions would stimulate greater effort than the more standard passive reception of lectures, worthwhile though they be. Efforts on this line have been more notable on the national than the state level.

Although study and reading with a specific goal is difficult initially, repeated exposure provides its own self-ignition because of the interest created, and if done in relation to a patient's problems, solutions are easier. Answers to the theoretical questions which might take months to secure can be found far more quickly if they relate to a specific patient's problem. Not as much cortical driving is necessary since many of the clues are there at hand and certainly the motivation. Comprehension gained this way is more rounded and better remembered since it need not be translated learning.

In the majority of occupational therapy schools, the scientific preparation in physical disabilities is less than in physical therapy schools when functional activities would seem to require as great a knowledge of structure and function if not more.

PROFESSIONAL

As supervisors are we preventing growth by too much supervision? Are we allowing others to help set their own goals? Dependence does not develop strength in staff, students or patients. By setting sights, we risk setting lower goals than they might set for themselves. The safety and security of well-defined boundaries such as specific assignments, authority over ideas as well as work, prevents individual development. Once exposed to the headiness of individual projects rather than merely satisfying someone else, the exposure usually takes.

All occupational therapists should add to our store of knowledge and general growth, not suffer technique and equipment contractures. We have a tendency to be dependent when there is need to exercise our muscles of initiative. Each must contribute at his own level so that the whole may be more complete, since each with different background and interest will see different facets of the same problem. The richness of research material and its application to treatment techniques has been slow to seep to the therapy level. Our responsibility is to read widely and observe, to think and bring to the doctor's attention those things which might affect the patient. Therapy will be only as good as the therapist.

The establishment of an advanced study treatment center should be contemplated, not in conjunction with any school of therapy but of and for the Association and its members. This would provide for dynamic interaction of minds under medical guidance. Some of the points to be considered in relation to such a center would be:

1. Inclusion of small groups of occupational therapists and allied professional groups. In the physical disabilities area, the physical and occupational therapist would be the basic interacting unit.
2. A nucleus of top therapists each with special abilities that all might learn from one another.
3. Therapists selected should have five or more years experience.
4. Theory and its application and practice must be integrated with enough time for studying, thinking and thoughtful application.
5. Individual courses for special weaknesses (such as written and oral communication) could be secured in other facilities.
6. This might be a central bureau for the proper consideration of new developments in the field, including testing of new treatment procedures and equipment ideas as well as evaluating existing procedures.
7. Preparation of abstracts and papers for professional publications should be a requirement.

Support could come from grants from numerous foundations and quarters are secondary to personnel and ideas.

SUMMARY

It is important in development and growth that there be stimulation from without and from within so that autogenetic or self-igniting facilitation and inhibition be developed. There are many steps along the road but heavy work patterns of effort and stress must be faced and overcome before the finer, higher level patterns are possible. Both movement and holding are necessary. In the past we have performed reciprocal innervation patterns for movement only, without the cocontraction patterns against stress. We have been assisting weak muscles and giving them the lightest work when a heavier work pattern given first would make the skilled pattern possible or easier. To change to the thought of heavy work patterns will be difficult, but by knowing all of the sensory stimuli for the appropriate sensory receptors it is possible to aid the desired pattern through the nervous system. Thought is necessary in order to put patterns of muscle work through the proper sequential order of normal development. Any omission or transposition of order will prolong the process or make the results imperfect.

The most important points in all of our developmental patterns are sequential order, activitation for primary and secondary action in movement, and the resistance to stress. These apply to emotional, intellectual and professional development as well as physical growth. With mastery of these points will come the auto-inhibition and facilitation so necessary for functioning

alone as a human being within the total group. We will then add our share to the heritage which has been given to us by others and which will be carried on in the future by many more. May our journey as explorers in life be fruitful and satisfying, and increasingly stimulating mentally. Our physical age of maturity has definite limits but our mental and spiritual age need not.

Professional Education . . .

(*Continued from page* 321)

be made within each of the medical areas for concentration within three broad subdivisons; teaching in occupational therapy, research in occupational therapy, or administrative leadership in occupational therapy.

It is recommended that a degree at the doctoral level be established as the appropriate graduate professional degree to be awarded upon the successful completion of the program.

It is recommended that the requirements for admission to the program and to candidacy for the degree be set up in conformity with the requirements for comparable work in other established, recognized programs. It is further recommended that the candidate present evidence of being a registered occupational therapist in good standing in the profession, and that he have a minimum of two years of clinical experience subsequent to the awarding of a master's degree or its equivalent.

It is recommended that the requirements for the degree, i.e., general, course, residence, time, field work, examination and dissertation, be comparable to established doctoral programs.

It is recommended that course offerings for the doctoral program include the pertinent courses of the several related disciplines and departments in the university. A survey of the curcula of other colleges and departments in the university should be made by the occupational therapy faculty in order to be cognizant of the educational possibilities for each candidate.

REFERENCES

1. This section follows in general the outline and concepts set forth in Wilma West's "A Proposed Kinesiology Syllabus for Occupational Therapy Based on an Analysis of Requirements of the Profession," unpublished master's thesis, University of Southern California, June, 1948, p. 1.
2. Willard, Helen S., and Clare S. Spackman, Eds. *Principles of Occupational Therapy, Second Ed.* Philadelphia: J. B. Lippincott, 1954, p. 24.
3. Sigerist, Henry E. *The University at the Crossroads.* New York: Henry Schuman, 1946, pp. 111-6.
4. Irwin, Mary, Ed. *American Universities and Colleges.* Washington: American Council on Education, 1956, pp. 51-2.
5. *The Occupational Therapy Yearbook.* New York: American Occupational Therapy Association, 1956, pp. 1-246.
6. Commission on Medical Education. *Final Report of the Commission on Medical Education.* New York: Office of the Director of the Study, 1932, pp. 263, 272.
7. Sigerist, op. cit., pp. 25-6.
8. *University of Pennsylvania Bulletin, School of Auxiliary Medical Services,* LVI. May 25, 1956, p. 29.
9. *Rebuilding Human Lives: The Rehabilitation of the Handicapped.* New York: The Seventh Co., Inc., May, 1957.
10. West, op. cit., pp. 34-5.

Improving Instruction . . .

(*Continued from page* 325)

manual, though these will ensue but, as I indicated previously, in the activity of individual members working on group goals in a manner highly pertinent to their own interests and situation—each working in his own sphere.

REFERENCES

1. Cottrell, Donald M. "Paradoxes for the Professional in Education," *Educational Research Bulletin,* XXXVI:2 (Feb.) 1957. College of Education, Ohio State University.
2. Robinson, Ruth A. "Nationally Speaking" column, *American Journal of Occupational Therapy,* XI:6, 1957.
3. Matthews, Martha E. "Summary Report of OVR Regional Institutes for Occupational Therapists." American Occupational Therapy Association joint meeting of education committees, Minneapolis, September, 1956.
4. Wells, Mildred C. "A Philosophy of Teacher Education," *Teacher Education: The Professional Education of Teachers Bulletin,* Illinois State Normal University, December, 1955.
5. Haskew, L. D. "Teacher Education in the Years Ahead," University of Texas, April 26, 1957.

NATIONALLY SPEAKING

NEW OFFICERS

The president-elect during 1957-58, Miss Helen Willard, O.T.R., was installed as president at the business meeting at the annual conference on October 21.

New officers of the American Occupational Therapy Association elected for the coming year:

First Vice-president: Beatrice Wade, O.T.R.

Board of Management members:

Re-elected

June Sokolov, O.T.R.

Newly elected

Martha Matthews, O.T.R.

Satoru Izutsu, O.T.R.

Newly elected officers of the House of Delegates:

Speaker: Ethel Huebner, O.T.R.

Vice-speaker: Clyde Butz, O.T.R.

Secretary: Elizabeth Keller, O.T.R.

Chairman, AOTA Nominating Committee: Mary Van Gorden, O.T.R.

Representatives to the Board of Management:

Dwyer Dundon, O.T.R.

Irene Robertson, O.T.R.

A complete list of officers is listed on the masthead, page II.

Eleanor Clark Slagle lecturer for 1959: Lillian Stewart Wegg, O.T.R.

From the President

In this, my first message as your new president, I want to express to you my deep appreciation of the honor bestowed upon me. I have accepted this great responsibility with humility and the full realization that it would be impossible for me to carry it if it were not for the unfailing support which you give. Your enthusiasm for your profession, your eagerness to work for it and your interest in its progress are the mainstays upon which we have built in the past and on which our future growth and development must depend. I will do my utmost to serve you faithfully and well.

Our recent conference in New York on the subject of "communications" has pointed up not only the complications which arise in making ourselves clearly understood by others but some ways of dealing with these problems. The rapid growth of our profession has presented difficulties in communicating and interpreting our functions and aims to both lay and professional persons. There is great need for us to continue to endeavor to clarify what occupational therapy really is and to define its true and most useful place in the medical group.

There are many other problems, most of them not new, with which we are confronted at the present time.

Miss Willard, O.T.R.
AOTA President

Recruitment of students is perhaps our most pressing need and our greatest problem. In spite of our national recruitment program, so generously supported by a grant from the National Foundation, our school enrollment has been going steadily downward. In 1958, the total number of students graduated from our schools was 50 less than in 1957 and some of our schools report decreased new enrollment as compared with last year. Occupational therapy departments are having to discontinue some of their services because of lack of personnel. Yet at the same time the demand for qualified occupational therapists is steadily increasing, salaries have risen and are in most cases similar to those of comparable personnel. Obviously we must bend every effort—the personal effort of each and everyone of us—to informing suitable young men and women of the need and of the opportunities which this profession presents. Will you make this one of *your* responsibilities?

The recruitment workshops which have been held this year in various parts of the country have undoubtedly helped to stimulate efforts of local groups. It, however, requires persistent, unflagging effort over years rather than months to create a strong tide of publicity and to produce real results.

Inevitably, in this connection, comes the question of scholarships which are still far too few and small to meet the need. More and more students are requesting financial assistance. Insufficient funds are available to enable students to start their college courses. Again this is something on which every occupational therapist's help is needed.

We are hopeful that the plan for training occupational therapy assistants will bear fruit in the near future but it is, perforce, going to have to start on a rather small scale and will take time for full development.

You all know, I am sure, of the curriculum study which is just being started under a grant from the National Foundation. The education committees of the Association which, of course, staffs have worked valiantly on educational matters with great sacrifice of personal time, energy and money. This grant now enables us to do much more in a shorter period than would otherwise have been possible. We are looking forward with the utmost interest to the material which will be compiled which should show us graphically what is required of the occupational therapist and whether the schools are adequately preparing students to meet the realistic demands of the job.

Support from the U. S. Office of Vocational Rehabilitation has been generously given to many of our schools for special projects, personnel and scholarships as well as to the American Occupational Therapy Association for the conference last year and the special workshops in which many of you have participated.

Other grants, such as that of the National Institute of Mental Health which permitted the holding of the Allenberry conference, have encouraged the self-evaluation which permits us to look at ourselves analytically as well as to learn what others think of us.

The financial assistance which has been forthcoming in recent years points up the fact that the value of occupational therapy has been recognized and that our efforts have been considered valuable enough to merit assistance in further development. Our boot straps have been sadly strained in the past but the future holds thrilling possibilities if we can meet adequately the many challenges presented to us.

Colonel Robinson's column in Nationally Speaking in the August-September issue of the American Journal of Occupational Therapy emphasizes our need of research in order to prove the claims which we make for occupational therapy and to clarify and crystallize concepts of its use. I hope that you have all read what she said. Research is one of our greatest needs and again is a responsibility of each one of us.

I wish that you all might have had the privilege of attending the 2nd Congress of the World Federation of Occupational Therapists in Copenhagen in August. We can no longer look upon just our own growth and development as a profession but must widen our horizons to include international aspects and to see to it that occupational therapy throughout the world plays its proper part in the rehabilitation of handicapped persons.

Think over these things, express to us your interest and willingness to help in those areas in which you are most interested, give us your ideas and opinions. If you do this, we cannot fail to solve many of our problems and to go forward in increased strength and stature.

Helen S. Willard, O.T.R.
President.

From the Education Office

It should be the grave concern of every occupational therapist that over-all enrollment in the approved occupational therapy curricula has dropped during the past few years. It is the feeling of many that the chief reason for this alarming drop is the rising cost of tuition and not lack of effort on the part of the directors of occupational therapy curricula or of our director of public information or local and national recruitment committees or individual members.

In these times the word "tuition" almost automatically brings to mind the word "scholarship." Certainly our students' and prospective students' needs for scholarships are great. We are all conscious of increasing our efforts to find sources of scholarship assistance for promising students.

We feel, however, that it is fitting in this educational issue of the American Journal of Occupational Therapy to not bemoan the lack of adequate volume of scholarships, but rather to point with pride and gratitude to the very considerable amount of money which it has been our good fortune to receive over the past few years. Various grants have enabled many students to complete their professional education. They, as are we, are deeply appreciative of the monies so generously given. The agencies and organizations and the amounts they have given to the American Occupational Therapy Association *since* 1954 for *undergraduate* scholarships is listed with pride on page 332.

The figures indicate only those scholarship funds which have been administered either partially or completely by the AOTA Education Office. The following organizations or associations have made awards directly to institutions and/or students or to state occupational therapy associations for scholarships in occupational therapy on the undergraduate level: Department of Welfare of the Commonwealth of Pennsylvania, Kappa Delta Phi, Minnesota Department of Public Welfare, National Association of American Business Clubs, National Society for Crippled Children & Adults, Inc., National Tuberculosis Association and state affiliates, New York State Department of Mental Hygiene, William J. Wollman Foundation, many of the schools of occupational therapy, and a number of state or regional occupational therapy associations.

AWARDING ORGANIZATION	*Year of Grant*	*Amount of Grant*	*Number of Recipients*
National Society Daughters of the American Revolution	1955-56	$ 500	1
	1956-57	500	1
	1957-58	500	1
Daughters of Union Veterans of the Civil War	1955-56	1,200	4
Picture Craft	1954-55	600	4
Office of Vocational Rehabilitation	1958	35,000*	figures not yet available
United Cerebral Palsy Research and Educational Foundation, Inc.	1954-55	15,000	88
	1955-56	10,000	54
	1956-57	10,000	63
	1957-58	10,000	58
	1958-59	10,000	figures not yet available
	TOTALS	$106,800	274--exclusive of current year

*Includes $7,200 for awards on the graduate degree level.

Many registered occupational therapists have also received considerable assistance at the graduate level from the following: Alpha Chi Omega National Women's Fraternity, Alpha Gamma Delta International Women's Fraternity, Atlantique, Elks National Foundation, Flower Guild of Los Angeles, Fulbright & Smith-Mundt funds, The National Foundation, and the Office of Vocational Rehabilitation. These and other sources have provided funds for study in this country or abroad.

Our collective hat is off to all our generous benefactors for their deep interest in the professional education of occupational therapists!

Virginia T. Kilburn, O.T.R.
Director of Education.

Curriculum Study Plans

The effectiveness of any service to patients is directly proportional to the caliber and training of the individuals conducting it. Thus the American Occupational Therapy Association has, in the past several years, expended considerable effort on the selection and education of occupational therapists to insure maximum quality of service rendered. With the aid of Kellogg and Grant Foundation funds and through the cooperation of committees, schools and clinical personnel, an intensive educational research program has been conducted to develop the most effective techniques for improving the selection and training of future occupational therapists.

To date, these efforts have yielded valuable educational materials; for example: the *Career Inventory* to aid the schools in selection of students; the *Curriculum Guide,* which serves as a basis for educational planning of professional courses; extensive clinical affiliation materials to provide minimum standards for the practice phase of the total educational program; and the objective type national registration examination for certification of professional competence. None of these, however, has attacked the problem of correlating what the occupational therapy student is taught with what the graduate is required to do on the job.

It is to this end that the Association's recently-initiated curriculum study will be directed. First conceived in 1951, this project has been in study and planning stages intermittently since that time and, in late 1957, was approved by the National Foundation for a three-year grant of $92,000. The project staff, consisting of three registered occupational therapists, was appointed in July and started work October first. Since that time, preliminary forms and materials have been developed for use in the various phases of the study and a "planning meeting" involving school, student affiliation and non-training center personnel has been held. The services of a job analyst and curriculum specialist have also been utilized on a consulting basis. Although it is still too early to comment on this study from more than a forecast point of view, it seemed fitting that the education issue of our *Journal* outline its general plan, the methods it will use and some of the results that are anticipated from the total project.

The curriculm study will be effected through a

comprehensive field investigation designed to accomplish the following objectives:

1. To develop a comprehensive list of the technical demands made upon the occupational therapist in clinical practice.

2. To compile a digest of the current occupational therapy curriculum with respect to technical knowledge, skills, techniques and procedures taught to students in both the schools and the student affiliation centers.

3. To review the specifics of the job demands and of the curriculum in preparing students for current practice.

4. To determine ways and means of organizing and revising the occupational therapy curriculum wherever necessary.

The first phase of the study—that devoted to the job analysis—will depend on the cooperation of many therapists in the field. A list of job requirements of the occupational therapist will be developed by observing, questioning and recording data about therapists at work. This job schedule will then be tested on other therapists and a third group of personnel from a representative selection of departments will be asked to cooperate in the final run. It is currently estimated that this phase of the field investigation will be conducted from January through August of 1959.

Concurrently with this phase, the first part of the curriculum survey will be initiated and will be equally demanding of the time and effort of therapists in the schools and clinical teaching centers. From these sources, the study will seek course outlines and related curriculum materials. In visits to schools and centers, the survey team will observe teaching methods, audit classes, talk with faculty and students and discuss means of teaching, evaluation and guidance. It is expected that both similarities and wide variations will be found among the educational programs of both schools and hospitals but that through this comprehensive survey of representative educational patterns, a broad picture of the current curriculum will emerge. This second phase, to be started in February of 1959, will continue through March of 1960 since nearly twice as many field visits will be required in contrast with the job analysis phase.

Final steps of the total thirty-two month project will be devoted to evaluation based on a comparison of job analysis data with curriculum survey data in an effort to determine the extent to which the present occupational therapy curriculum is integrated with current occupational therapy practice.

The data derived from this study should have far-reaching effects on the current curriculum for our profession. For example: the job analysis findings should include:

1. The specific requirements of the job of the occupational therapist.

2. The level of preparation required to satisfy job demands.

3. The nature of the content to be included in the curriculum.

4. Guides as to the relative contributions of education and experience to the job performance of the occupational therapist.

The data obtained from the academic survey should reveal:

1. Commonalities and variations in the emphases on various phases of the course content.

2. Commonalities and variations in the specific course content of the OT curriculum.

3. Commonalities and variations in evaluation of student performance.

It is anticipated that a functional analysis can then be made which will permit each school to reorganize or revise its curriculum wherever found necessary. Guide lines would be set up for procedures which can be undertaken by individual schools and student affiliation centers so that adjustments can be made in the curricula as changes occur in practice.

Wilma West, O.T.R.
Coordinator.

EDITORIAL

EDUCATION THROUGH PROGRESS

Kipling immortalized the word "If" only because he expressed so aptly the wonders such a minimum combination of letters can achieve. Regardless of what we do, what we view, *if* we do this, *if* we do that, certain results will follow. Individually the alternatives present a poser; association-wise these individual posers are magnified by the number of members involved.. And because *if* opens so many avenues for future development, only careful analysis and study can guide us in our selection.

None of us are seers nor are we interested in prophesying; but our plans of today will influence our tomorrows. In this educational issue some possible precepts for the future are presented, not rigid laws to follow nor bald avenues with no alternatives. The articles analyze our various treatment areas with suggestions for our consideration. The *if* in our decisions will determine our future course and little is gained by ruminating on what might have been *if* any other decision had been made.

The results of our analyses place a tremendous burden on us but it is evident from the survey of the articles that no one person is capable, able or justified to make the decisions for all of us. Therefore the work has just begun. This material lays forth our alternatives which are no freeways or parkways, but rather cloverleaves of alternatives that open up vistas for future progress. We are truly the "captain of our fate."

A GUIDE FOR THE DEVELOPMENT OF GRADUATE EDUCATION LEADING TO HIGHER DEGREES IN OCCUPATIONAL THERAPY*

AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

PHILOSOPHY

1. Basic principles generally underlying graduate education today should apply to graduate education in occupational therapy. It should be firmly based upon (i.e.: require as a prerequisite) a comprehensive general education, demonstrated professional competence, and proven intellectual ability. Emphasis should be given to historical, philosophical, cultural and behavioral concepts and understanding which will develop social awareness, the ability to do creative thinking and to make mature and independent judgments. Graduate education is seen as only one step in the continuous professional growth of the well-qualified occupational therapist.

2. The clear definition of objectives is of the utmost importance. Those of the institution, the curriculum and the graduate student should be in practical relationship to each other, and should meet acknowledged needs in the field. They should be broad enough, yet sufficiently limited, to develop a high degree of competence in the area in which the graduate is presumed to be qualified by virtue of his graduate education.

3. Graduate programs in occupational therapy are appropriately developed in those institutions in which graduate programs in allied fields have sufficient strength in their faculty, library, physical and financial resources to justify offering advanced work.

4. The program should conform to the standards of the appropriate regional accrediting organizations and should be developed in consultation with appropriate executives and committees of the American Occupational Therapy Association.

5. While this guide is appropriately concerned with higher degrees in occupational therapy, it does not minimize the value of those taken in related fields. Both types are recognized as contributing to the development of education and practice in occupational therapy.

CURRICULUM

1. The primary consideration guiding the development of the curriculum must be the fulfillment of the objectives for which it is intended. Any graduate curriculum leading to a higher degree in occupational therapy should give the student a broad understanding of human behavior, the basis of professional practice, and a functional knowledge of and experience in research methods. Beyond this, it should provide for competence in the area in question.

2. Graduate credit should be given for individual courses designed primarily for graduate work. Courses which are designed to review or refresh the competence of previous graduates or to help them to keep up to date and which contain material belonging in current undergraduate curriculums may be required as a prerequisite but should not carry graduate credit. Freedom from unnecessary prerequisites is highly desirable.

3. A substantial portion of the courses in any one student's program should be in his major field while those outside should add to his liberal education as well as contribute to the fulfillment of his objectives.

4. In planning programs leading to a master's degree in occupational therapy, attention should be given to the requirements for a degree at the doctoral level. The master's degree should not perforce be a terminal degree but should constitute a valid step toward a doctorate.

5. In graduate programs adequate consideration should be given to field work which includes an advanced practicum and laboratory experience.

6. Universities offering graduate education should welcome initiative taken by interested clinical centers in the development of opportunities for graduate study.

FACULTY

1. The faculty should have a broad underlying general education and should hold advanced degrees in a variety of fields relevant to occupational therapy and from a variety of institutions.

2. Personnel policies should allow faculty to maintain their competence and to participate to a reasonable extent in the work of community and professional organizations.

3. It should be recognized that necessary curriculum planning as well as the teaching, supervision and guidance of individual students is very demanding of faculty time and their program should be regulated accordingly.

STUDENTS

1. Those intending to undertake education in occupational therapy should be potential leaders in their cultural and professional community, and should exhibit outstanding intellectual ability, and must have clear realistic objectives to be fulfilled through study.

2. They should present a good general education plus approved professional education and competence in the area of intended study, and significant work experience in the same.

RESOURCES

1. Resources should be in planned relationship to the objectives of the program. Physical facilities, financial support, opportunities for research, library and reference material and resource personnel should be clearly adequate to facilitate the accomplishment of the objectives of the university, the clinical center and the individual student.

2. To insure continuity it is desirable that financing not be dependent on annual grants nor students' fees.

ADMINISTRATION

1. It is recommended that the graduate education program have a clearly defined place in the administrative structure of the institution and that it be accorded support, facilities and assistance comparable to that accorded similar programs within the same institution.

2. Under the graduate authorities of the university the program should be directed by an occupational therapist who meets the requirements established for similar administrative faculty positions within the institution.

3. Adequate provision should be made for securing appropriate and regular advice and consultation for the program as a whole, for particular aspects of it and for individual students. Effective use of a variety of highly qualified resource persons is of great value in defining and meeting objectives.

4. If quality is to be achieved and maintained, all phases of the program should constantly be evaluated. All personnel concerned with each aspect of the program should participate in this evaluation. Excellence is measured by the emphasis given to the values of general education, by the importance of the stated objectives, and by the degree of success achieved in reaching them.

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*Prepared by the committee on graduate study and approved by the council on education of the American Occupational Therapy Association.

RESPONSIBILITY AND PREROGATIVE

1. The American Occupational Therapy Association, its executive staff, council on education and committees are appropriately concerned with graduate education in occupational therapy. They develop standards and materials for the guidance of individuals and institutions and serve in an advisory capacity as indicated.

2. Colleges and universities, in collaboration with the above and with clinical centers, offer programs leading to higher degrees in occupational therapy. Those providing outstanding undergraduate programs should give serious consideration to undertaking a graduate program, appropriate objectives and resources available to achieve them.

3. It is expected that institutions will meet the standards properly required of them and will then be responsible for all details of the program such as the formulation of objectives, securing qualified personnel, developing curriculums, providing adequate resources, and conducting regular evaluations.

4. It is intended that the principles herein outlined serve as a guide to colleges and universities, to clinical centers, and to individual therapists as they implement their concern with graduate education in occupational therapy.

EDUCATIONAL MATERIALS

Available From

EDUCATION OFFICE, AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

250 West 57th Street, New York 19, N. Y.

Essentials of an Acceptable School of Occupational Therapy Prepared by Council on Medical Education and Hospitals, American Medical Association. Reprint, Journal of AMA, Dec. 17, 1949 — Free

Standards for Training in Occupational Therapy. An elaboration on some aspects of the *Essentials* (above) — Free

The Educational Philosophies and Procedures of the American Occupational Therapy Association (Prepared for the Medical Advisory Council) — Free

Curriculum Guide for Occupational Therapy (limited distribution) — $2.50

Policies and Guides for Directors of Occupational Therapy Curricula (limited distribution)

Career Inventory (limited distribution)

Occupational therapy student selection instrument

Manual — $1.25

Inventories — .75

Keys (set of 8) — .50

Answer sheets (set of 4) — .25

Director's Guide for a Student Affiliation Program — $1.00

Rater's Guide (limited distribution) — .45

Statement of Policy on Advanced Study — Free

A Guide for the Development of Graduate Education Leading to Higher Degrees in Occupational Therapy — .20c

Student Affiliations (limited distribution) — $1.00

A manual for students

LOAN MATERIALS

Up-to-date collections of sample instructional materials prepared by student affiliation centers are available to registered occupational therapists in the areas of general medicine and surgery, pediatrics, physical disabilities, psychiatry and tuberculosis. A handling fee of 50 cents plus postage is charged for the loan of this material.

Theses written by O.T.R.'s in partial fulfillment of their master's degree requirements are also available on a loan basis. A list of titles will be furnished upon request.

UNITED CEREBRAL PALSY EDUCATIONAL AND RESEARCH FOUNDATION SCHOLARSHIP FUND FOR OCCUPATIONAL THERAPY STUDENTS

1957-58

During the academic year of 1957-58, United Cerebral Palsy granted $10,000 for a scholarship fund for undergraduate occupational therapy students. Twenty-eight OT schools received the equivalent of 70 per cent of one year's average tuition costs. The selection of recipients was the responsibility of the college or university scholarship committee and the director of the occupational therapy curriculum in the institution. This committee then reported to the American Occupational Therapy Association. Thus, recipients were selected by those in a position to know the potentialities and needs of the applicant.

DISBURSEMENTS

	First Installment	*Second Installment*	*Total for 1957-58 academic year*
1. Number of schools participating	28	28	28
2. Number of applications for scholarships from this grant	156	177	333
3. Number of students receiving awards from this grant	38	43*	58
4. Recipient's academic year in school			
a. Junior	10	7	17
b. Senior	19	25	44
c. Advanced standing	3	6	9
d. Clinical affiliations	6	5	11
5. Number of states represented by recipients	17 plus Canada	18 plus Hawaii & Canada	20 plus Hawaii & Canada
6. Amount of money awarded	$4,143.96†	$5,099.56	$9,243.52
7. Range of scholarship awards	$10.00-302.00	$19.00-325.00	

*23 of these recipients also received funds from the first installment.

†$619.25 held for awarding during second semester.

CHILDREN'S REHABILITATION INSTITUTE FOR CEREBRAL PALSY

POST GRADUATE COURSE

OCCUPATIONAL THERAPY TECHNIQUES OF TREATMENT IN CEREBRAL PALSY

UNDER DIRECTION OF:

Winthrop M. Phelps, M.D.
Medical Director

An intensive eleven week course inclusive of 144 lecture hours and 213 clinical hours in treating a varied caseload while apprenticed to an experienced registered therapist. Detailed discussions of self-help techniques, records, equipment and all phases of a total program for the cerebral palsied for all types of communities.

COURSE DATE:

Jan. 5 through March 20, 1959

Enrollment must be processed and approved three weeks prior to course date.

TUITION: $150 for full 11 weeks

For further information contact:

RUTH W. BRUNYATE, O.T.R.

Administrative Assistant

In Memoriam

Miss Rebacca Adams
Deceased, December, 1957

Mrs. Ann O. Andruss
Laurel, Md.

Mrs. Lorraine P. Bradley
Chicago, Ill.
Deceased, September 2, 1958

Madre Francesca Chiara
Florence, Italy
Deceased, May 11, 1958

Mrs. K. Dunford
Ojai, Calif.
Deceased, January 9, 1957

Mr. Robert P. Glass
San Bernardino, Calif.
Deceased, August 25, 1958

Miss Elizabeth R. Greathouse
Lexington, Ky.
Deceased, August 26, 1958

Mrs. Ella Manore
Flat Rock, Mich.

Mrs. Helen Rea
Seattle, Wash.
Deceased, July 2, 1958

Mrs. Lulu Stewart
Tacoma, Wash.

CLASSIFIED ADVERTISING

Classified advertising accepted for POSITIONS WANTED and POSITIONS AVAILABLE only. Minimum rate $3.00 for 3 lines; each additional word ten cents. (Average 56 spaces per line). Copy deadline first of each month previous to publication.

POSITIONS AVAILABLE

Wanted: OTR, female with psychiatric experience. To assume responsibility, after a period of indoctrination, for 45-bed private unit. Benefits—board/room, Blue Cross, sick leave, social security, insurance policy after one year, other standard benefits. Salary open. Elmcrest Manor, 25 Marlborough St., Portland, Conn.

Position open, Saint Albans Psychiatric Hospital, Radford, Virginia. Recreation and occupational therapy director for 120 bed private psychiatric hospital located in southwest Virginia. Prefer young woman who has completed training—interested in a challenging situation. Wonderful opportunity for growth. Address inquiries: Don Phillips, Administrator, Box 1172, Radford, Virginia.

Registered occupational therapist for permanent position in modern 250 bed general hospital. Northeast Ohio area. Primary duties would be in connection with orthopedic department known as Gates Hospital for Crippled Children. Write Personnel Director, Elyria Memorial Hospital, Elyria, Ohio.

Occupational therapist for Cerebral Palsy Treatment Center. Fully equipped. Good working conditions. Excellent salary. Scholarship funds available for additional training. Write Herman L. Rudolph, M.D., 400 North Fifth Street, Reading, Pennsylvania.

Wanted: occupational therapist for children's convalescent hospital. Live in. 5 day week. Semi-yearly increments, social security. Apply Superintendent, Betty Bacharach Home, Longport, N. J. (Atlantic City).

Occupational therapist to establish occupational therapy section of new children's rehabilitation center. Entire center and operation new. Occupational therapy center equal status with other co-medical sections. Persons applying must be qualified and willing to assume chief rating in year or so. Salary open and commensurate with qualifications. Refer replies to Dwight M. Frost, M.D., Medical Director, 600 Doctors Building, Omaha, Nebraska (5).

Eastern State Hospital, Medical Lake, Washington, has received authorization for additional positions. Hospital is moving from custody orientation to therapy orientation in all areas. Additional occupational therapy personnel now authorized, 23. Vacant position for director of department, senior and junior therapists and occupational therapy aides. O.T.R. salary range from $4368 to $6732 depending on qualifications and experience. Apply G. Lee Sandritter, Superintendent, Eastern State Hospital, Medical Lake, Washington.

Excellent opportunities for occupational therapists to use knowledge and abilities in developing a progressive, dynamic program. Located in suburban Louisville, Kentucky, which offers educational and cultural advantages. Starting salary per year $4296, 40 hour week, paid vacation and sick leave, 13 holidays per year, opportunity for advancement to supervisory posisitions. Contact Miss Margaret Biener, Director of O.T., Central State Hospital, Lakeland, Kentucky.

Assistant director, modern tuberculosis hospital with affiliation program. Close liaison with active state rehabilitation program. Patient rehabilitation conferences with heads of professional services. Five-day, 40-hour week, paid vacations, 7 holidays, sick leave, social security. Excellent opportunity for progressive administrator. Send resume to Mrs. May Yokoyama, Director, Occupational Therapy, Emily P. Bissell Hospital, 3000 Newport Gap Pike, Wilmington 8, Delaware.

Occupational therapist, registered, staff level; interested in working with amputees, polios, paraplegics, cerebral palsy and related diagnoses. Rehabilitation hospital with present bed capacity of 65 beds. Planning now underway for expansion of in-patient and out-patient facilities. Progressive personnel policies. Salary commensurate with experience and training. Apply Administrator, Eastern N.Y. Orthopaedic Hospital-School, Inc., 124 Rosa Road, Schenectady 8, New York.

Registered occupational therapist with at least two years experience, preferably in cerebral palsy or physical disabilities. Direct department in hospital-school for physically disabled children, in and out patients, neuromuscular and orthopedic conditions. Coordinated program among OT, PT, speech and education. New department with home training, ADL, functional activities. Recreation facilities, three three-week vacations per year; salary $4500 and up depending on experience. Write Mr. Keith Newcomb, Principal, Crippled Children's Hospital and School, Sioux Falls, South Dakota.

Occupational therapist—registered, staff level, 600-bed tuberculosis hospital for the District of Columbia, J.C.A.H.; active rehabilitation program; salary $4,040 to $4,980; room $13.00 month; 8-hour 5-day week; vacation 104 hours per year, 160 hours after 3 years' service; hospital located 15 miles from center of Washington, D. C.; sick leave; retirement; insurance and other fringe benefits available. Write to: Moe Weiss, M.D., Superintendent and Medical Director, Glenn Dale Hospital, Glenn Dale, Maryland.

Occupational therapist staff position, preferably some experience in cerebral palsy. Outpatient center, all ages, offering physical therapy, occupational therapy, speech therapy and special education. Some student training program. Annual four weeks paid vacation. Hours: 8:30 to 4:00, Monday through Friday. Salary open. Apply: Miss Modenna M. Brossard, R.P.T., Coordinator, 502 W. Mistletoe Avenue, United Cerebral Palsy Treatment Center, San Antonio, Texas.

Wanted: industrial therapist, man or woman, must be O.T.R. with 1 year of experience. 2 occupational therapists to manage OT shops in expanding program. Research program now underway, looking forward to student affiliation program soon. Attractive university town in mountain and lake setting. Salary range $340 to $415 monthly. Social security. Please write for details: Mrs. Alice H. Peden, O.T.R., Director of Rehabilitation Therapies, Utah State Hospital, Provo, Utah.

Wanted: Occupational therapists, men and women, for a full approved, large psychiatric hospital in New England, midway between New York and Boston. Active in teaching and research. Large, new occupational therapy center, "the building of tomorrow." New and modern equipment, dynamic all-inclusive treatment program for patients. Large affiliating student group with excellent education program. Modern home, maintenance optional. Liberal retirement plan and illness policy. Paid vacations and holidays, automatic increments. Rotating services which offer professional growth.

Immediate appointments, Write: Harry Kromer, O.T.R., Norwich State Hospital, Norwich, Connecticut.

Wanted: O.T.R. for cerebral palsy foundation. Salary open, five (5) day week, one (1) month paid vacation after one year of service, paid holidays, lunch, uniforms, laundry, employee benefits (social security, Blue Cross, Blue Shield), established, well equipped department, air conditioned, pleasant working conditions in a progressive gulf coast city of 140,000 population. Contact (Mrs.) Margaret L. Snyder, Cerebral Palsy Foundation, 1350 Broadway, Beaumont, Texas.

Immediate placement for registered, qualified occupational therapists in rapidly expanding physical medicine and rehabilitation institute serving two hospitals, total 1,000 general medical and surgical beds, in largest centrally located industrial center in Illinois. Experience in supervisory position and in comprehensive rehabilitation center necessary. Write: Administrator, Institute of Physical Medicine and Rehabilitation, 619 North Glen Oak Avenue, Peoria, Illinois.

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In the Care of *Neuro-Muscular Disease*

This course is open to graduates of approved schools of physical and occupational therapy. Such graduates must be members of the American Physical Therapy Association and/or American Registry of Physical Therapists, or American Occupational Therapy Association.

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In-Service Training Program—Fifteen months duration at salary of $225 per month plus full maintenance, increasing to $250 per month at the completion of nine months. This program includes training in course I and II.

Tuition: None. Maintenance is $100 per month. For scholarship to cover transportation and maintenance for course I and II, contact National Foundation for Infantile Paralysis, Inc., 301 East 42nd St., New York 17, N. Y. (Scholarships require two years of experience.)

For further information contact:

ROBERT L. BENNETT, M.D.
Medical Director

Georgia Warm Springs Foundation
WARM SPRINGS, GEORGIA

Registered occupational therapist for staff position, cerebral palsy department. Salary $4,300-$5,310. Excellent working conditions and fringe benefits. Write: Lavinia M. Davidson, Director CP Dept., New York State Rehabilitation Hospital, West Haverstraw, N. Y.

Rehabilitation services program needs graduate OT's, eligible for later registration. Experience not necessary. Professional growth and satisfaction guaranteed. Excellent starting salary, pension, liberal holidays, vacation and sick leave. Apply for immediate employment to Mr. Stanley Doenecke, Director, Rehabilitation Services, Tuberculosis Hospital, Oak Forest, Illinois.

Qualified occupational therapist with experience, to work as member of medical team in 900 bed teaching hospital affiliated with Western Reserve University. Supervisory opening in tuberculosis section expanding into area currently under construction. Five-day week, paid vacation and sick leave, meals, room, and laundry available at minimal cost. Salary dependent upon qualifications. Pension plan. Apply: Nadene Coyne, M.D., Director, Dept. Physical Medicine & Rehabilitation, Cuyahoga County Hospital (formerly City), 3395 Scranton Rd., Cleveland, Ohio.

Occupational therapists for California state hospitals. Progressive program presents opportunities for imaginative, resourceful therapeutic activities. O.T.R. works as member of professional team toward goal of total rehabilitation of the individual patient. No experience required to start at $376; promotions possible to $644. Three weeks paid vacation annually and other employee benefits. Write State Personnel Board, 801 Capitol Avenue, Sacramento, California.

Occupational therapist—to initiate OT program in private 272 bed hospital. Salary open; one year experience desirable. Apply: Ivan Kline, Chief PT, Baptist Memorial Hospital, Jacksonville, Florida.

Qualified OT for well-equipped out-patient treatment center with Crippled Children's Society. Liberal salary, one month's vacation. Write Mrs. Robert E. Everhart, Ex. Secy., Lycoming County Crippled Children's Society, 625 W. Edwin St., Williamsport, Pa.

Wanted: registered occupational therapist to organize new service program for chronically handicapped and mentally retarded. Salary open for discussion. Apply to Beloit Visiting Nurse Ass'n., Beloit, Wisconsin.

Occupational therapist: Medically supervised program geriatric rehabilitation. Salary range $4320-$4960 in two years. Liberal personnel policies. Maintenance available. 5 day, 40 hour week. Must be graduate of accredited school. Contact Westchester County Home, 25 Bradhurst Avenue, Hawthorne, N. Y. LYric 2-8300.

Registered occupational therapist to carry forward dynamic progressive program in small accredited psychiatric hospital which considers OTR essential part of treatment team. Therapeutic community, open-door policy, student training affiliations. Salary open. Contact Henry W. Coe, Administrator, Morningside Hospital, Portland 16, Oregon.

Occupational therapist needed for the Park Public School unit for the physically handicapped. Interested registered therapists may contact Dr. John C. Thompson, 720 S. 22 St., Lincoln, Nebraska.

O.T.R. to work with CP and other crippled children. Paid vacations—good personnel policies—apply Director, Broward County Society for Crippled Children and Adults, Bldg. 8, Naval Air Station, Ft. Lauderdale, Florida.

Occupational therapist, registered, staff level, for out-patient rehabilitation center treating children and adults. New building with excellent treatment facilities, located in one of the cultural centers of the state, directly on the Gulf of Mexico. Starting salary $4200, automatic increments, 37½ hour week, one month paid vacation and holidays, sick leave and hospitalization. Contact: Executive Director Happiness House, Inc., Sarasota, Florida.

Occupational therapist to take charge of department in children's rehabilitation center, primarily cerebral palsy. Careful screening program, university affiliations, teaching program, good working conditions. Starting salary dependent upon qualifications. Apply Martha Norris, Director of Rehabilitation, N. C. Cerebral Palsy Hospital, Durham, N. C.

Younker Memorial Rehabilitation Center, a 120 bed addition to Iowa Methodist Hospital (which includes Raymond Blank Memorial Hospital for Children) will offer unusual opportunities for registered occupational therapists. Five day, 40 hour week. Liberal benefits. Salary commensurate with training and experience. Opportunity for advancement. Apply Personnel Director, Iowa Methodist Hospital, Des Moines, Iowa.

Registered occupational therapist preferably with psychiatric experience needed for instructor at College of Puget Sound. For further information write Mrs. Elizabeth R. Waggoner, Director, School of Occupational Therapy, College of Puget Sound, Tacoma 6, Washington.

Wanted now: Applicants for key positions for clinical and school program in new hospital to open summer of 1959—chief therapist for comprehensive rehabilitation center, chief therapist for pschiatric unit, instructor for occupational therapy curriculum. Positions require significant clinical experience, some supervisory experience and interest in teaching and research. Detailed information on request. Division of Occupational Therapy, Department of Physical Medicine and Rehabilitation, School of Medicine, University of Washington, Seattle 5.

Director of occupational therapy, for 300 bed accredited private neuro-psychiatric hospital. Salary open, excellent working conditions, and personnel policies. Write to Personnel Director, St. Vincent's Hospital, 7031 St. Charles Rock Road, St. Louis 14, Mo.

Female registered occupational therapist for 1400-bed mental hospital. Must be able to organize and direct present occupational therapy department. Good working conditions and fringe benefits. Delaware State Hospital, Farnhurst, Delaware.

Career opportunities for registered occupational therapists: senior occupational therapist, occupational therapist. Treatment program with acute psychiatric patients, both children and adult; civil service benefits; promotional opportunities excellent; location near Princeton—accessible to New York and Philadelphia; reasonable maintenance if desired. Apply: Harold E. Miller, Personnel Director, N. J. Neuro-Psychiatric Institute, Box 1000, Princeton, N. J.

Occupational therapists are needed in the Orlando and Fort Lauderdale areas. Send resume of experience and interest to United Cerebral Palsy of Florida, 717 Olympia Building, Miami, Florida.

Chief O.T.R. in new 50-bed rehabilitation hospital. Newly equipped department treating polio, orthopedic and cerebral palsied children. Three years experience. Starting salary $395. Three weeks vacation, Blue Cross and 40-hour work week. Write: Administrator, Crippled Children's Hospital, 200 Henry Clay Avenue, New Orleans, La.

Recent registered occupational therapist graduate wanted to develop OT program for new 100 bed psychiatric unit. Write Personnel Dept., Methodist Hospital, 1604 N. Capitol Ave., Indianapolis 7, Indiana.

Occupational therapists needed for expanding department. Beginning salary $4,368, annual increases, paid vacation, sick leave, retirement benefits; five-day wk. Newly constructed treatment center. Apply: Miss Patsy J. Brittain, O.T.R. Senior Occupational Therapist, Department of Labor and Industries Rehabilitation Center, 708 4th Ave., Seattle, Washington.

Immediate opening for registered staff therapist in a 600 bed general hospital. Modern and well equipped rehabilitation clinic offers treatment for both physically handicapped and neuropsychiatric patients. Program is extended to outpatients. Salary is commensurate to experience and housing is available for single therapist. New unit for entire physical medicine and rehabilitation department is now under construction. For further information contact Miss Josephine A. Simione, O.T.R., St. Francis Hospital, Hartford 5, Connecticut.

O.T.R. with administrative experience. Unusual opportunity to develop and direct integrated program of rehabilitation therapies in progressive state hospital with 3,000 patients. Lovely new air-conditioned OT building located in charming city of over half million with rich community potential. Beginning salary $5,400, with retirement and other benefiits. Write Superintendent, San Antonio State Hospital, P.O. Box 1840, San Antonio, Texas.

Wanted at once—an occupational therapist for position in small mental hospital. Write Dr. S. Wayne Smith, M.D., State Hospital, South, Blackfoot, Idaho.

Connecticut state chronic disease hospital. Two OTR positions immediately available in 275 bed hospital in Hartford vicinity. Living quarters available. Civil service benefits. Salary range $3300-4740. Apply to Superintendent, Cedarcrest Hospital, Newington 11, Conn.

Wanted: a trained or registered occupational therapist to assume supervision of entire OT-RT program in small private psychiatric hospital. Salary open. Contact by mail, Medical Director, Carrier Clinic, Belle Mead, N. J.

Registered occupational therapist needed for our newly equipped branch of service. Will be in full charge of work. Term of contract ten and one-half months. Hours nine to four o'clock. Salary $4200 to $4800, depending on experience. Prefer someone with some experience in cerebral palsy. Apply to Mrs. D. A. MacGregor, Executive Director, Wheeling Society for Crippled Children, 1316 National Rd., Wheeling, W. Va., for details.

Immediate opening for qualified registered occupational therapist. 180-bed hospital. 40-hour week. Salary, $4200 per year, plus other employee benefits. Facilities in new rehabilitation addition. Psychiatric, polio and paraplegic rehabilitation programs. Contact Sister Concepta, Saint Vincent's Hospital, Billings, Montana.

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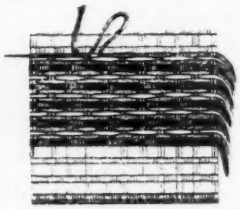

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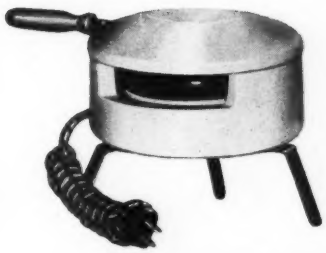

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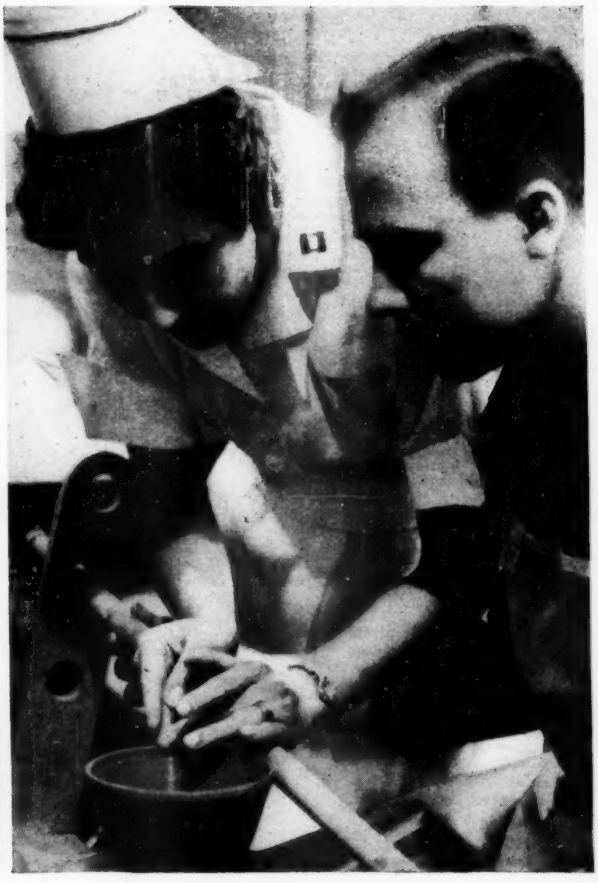

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